NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

Web: www.nitt.edu Phone: 0431 –250 3830



TENDER DOCUMENT (TECHNICAL BID)

Renovation work to Gents & Ladies Toilets

Name of work : (Total: 6 Nos) in ECE Department at Silver

Jubilee Building.

Value of work : Rs.12,32,289/-

Tender Enquiry: NITT/EMD/EE/CIVIL/IZ/Enq.No32(235)

No. Dt:26.04.2018

Period of Contract : 90 days



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPALLI -620 015.

Estate Maintenance Department

NOTICE INVITING TENDER

01.Name of work :		Renovation work to Gents & Ladies Toilets (Total: 6 Nos) in ECE Department at Silver Jubilee Building.
02. Estimated Cost	:	Rs.12,32,289 /-
03. Earnest Money Deposit	:	Rs.24,700 /-
04. Completion Time	:	90 Days (From the date of commencement of the work which will be reckoned from the date of handing over of site to the Contractor)
05. Cost of Tender Document	:	NIL
06. Last Date & Time for Receipt of Tenders	:	15.00 Hrs. on 11.05.2018
07. (a) Date & Time of Tender Openin (Technical bid)	ıg :	15.30 Hrs. on 11.05.2018
(b) Opening of Price bid	:	Only qualified bids on the same day & time
08. Maintenance Period	:	6 (Six Months from the date of actual completion of the entire work and handing Over to National Institute of Technology)
09. Address for submission of Tender	:	The Director, National Institute of Technology, Tiruchirappalli - 620 015
Tender document contains 39 pages in	nclud	ling Price Bid
Name of the Agency Submitting the tender		

Check list to evaluate the capability of the tenderer qualifying for price bid opening.

SI.No	Description / Requirement from the tenderer	Tenderer's response should be clear, firm, complete & legible. If necessary, separate sheet shall be used.
1	Name & Complete address of the tenderer with contact details:	
2 (a)	Details of Document cost (should be in the form of DD) Demand draft No. Amount Rs. Bank details:	(Bids without document cost /EMD will be summarily rejected unless copy of NSIC with valid registration is attached)
2 (b)	Details of EMD (should be in the form of DD) Demand draft No. Amount Rs. Bank details:	
2 (c)	NSIC Registration No: Company Name & Address: Validity: Product for which registered:	
3	Status of the tenderer: Proprietorship / Partnership / Private Limited. / Public Limited	
4	Details of electrical license obtained and issuing authority	
5	Details of Contract Registration with Govt. depts. Class and value	
6 (a)	Details of PAN	
6 (b)	Employees provident fund Registration:	
6 (c)	Employees State Insurance Registration:	
6 (d)	GST Registration:	
6 (e)	Sales Tax Registration:	
7	Copy of Income Tax Return for the last 3 years ending 03/2017	
8	Details of similar works executed with Govt. depts. during last 3 years	Use separate sheet to furnish complete details

Note: Attested copy of relevant certificates for items 2©-8 are to be enclosed.

I/We hereby certify that the information furnished above and the attached documents as proof of the information are true and correct to the best of our knowledge.

I/We understand that these details are required to decide our eligibility to participate in the tender process and opening of our price bid thereon.

I/We also authorize the Director / NITT or his representative to approach the source of the certificate to verify our competence, if required, for processing the tender.



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPALLI -620 015. Estate Maintenance Department

INSTRUCTION TO TENDERERS

- 1) The tender value includes cost of cement, reinforcement steel, structural steel and all other related material required for completion of the work.
- 2) Time is the essence of the contract. Being a time bound project, the contractor should make all efforts to complete the work in time.
- 3) Even though the overall completion period is indicated as **90 Days**, the work shall be completed progressively and handed over as per agreed split up schedule if any.
- 4) The tenderers are advised to visit the site and get themselves acquainted with the site conditions before submitting the offer.
- 5) Tender quantity is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 30% (thirty percentage).
- 6) Quoted rate shall remain valid for a period of 90 days from the date of tender opening for the release of work order and will be firm throughout the contract period of **90 Days** or till completion of work, once awarded and no cost escalation is allowed on any account.
- 7) The item rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete. Rate quoted shall exclude GST. The applicable GST can be reimbursed by NITT along with the running / final bill on production of documentary evidence by the agency for having paid the GST to the authorities concerned.

The Tenderer should be a GST Registered Contractor and should have filed returns with respect to GST and proof of documents should be furnished.

If the proof of ESI,EPF & GST registration is not furnished the tender of the tenderer will

8) Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The rates quoted shall be deemed to be inclusive of all such contingencies

not be eligible for opening price bid and become disqualified.

- 9) The work shall be carried out as per drawings released then and there, BIS/CPWD specifications, and standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities. Tenderer has to quote rates both in figures and in words for all the items given in the Bill of Quantities provided in the Price Bid.
- 10) For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the procedure given in CPWD manual.
- 11) The contractor has to furnish the security deposit, as per the Clause indicated elsewhere in this document, if the work is awarded. Further the contractor has to furnish 50 % of security deposit before signing of agreement and commencement of work. {Refer Clause 47 (III)}
- 12) Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is

done without the presence of contractor's representative at the work spot, whose strength depends on the value of contract awarded. The contract should arrange for surveying construction site at his own cost.

- 13) The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
- 14) The works contract to be entered into with the successful tenderer will be governed by the CPWD Works Manual in force.
- 15) The contractor shall strictly adhere to various labour laws in force.
- To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
- 17) The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work.
- Expertise labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, water supply, railway track laying and aligning works, sewerage system work, etc.
- 19) The contractor shall follow norms of NITT security system for movement of men & materials within the complex.
- 20) All the works shall be executed as per the standard specifications as provided in CPWD / BIS.
- All the materials to be used in the work and the nature of work shall conform to the respective CPWD & BIS and National Building Organisation, Standard Specifications forming part of "DELHI STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
- All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
- All safety measures are to be followed during execution of work, particularly during blasting and only licensed blaster should be engaged for this purpose. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department. Damages caused if any shall be rectified at contractor's risk and cost.
- The contractor should extend fullest co-operation with the third party agencies engaged, if any by NITT, to adhere the Quality Control Procedures ensuring quality.
- 25) The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
- Tenderers are requested to furnish the duly filled in E format attached as separate sheet along with a cancelled cheque leaf to accept Electronic fund transfer / R T G S transfer for any payment from NITT, Trichy.
- 27) No advance / mobilization advance will be given.
- 28) LD / Penalty clause is applicable as per CPWD Works Manual in force.

- 29) NITT reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract awarded against a different Tender.
- The tenderer has to ensure payment of Minimum Wages as per Central rules and Minimum Wages as applicable under law from time to time.
- Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid
- The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid / abide by BOCW Act / Coverage in Group Insurance Scheme / All Risk Policy.
- Rate for each item should be quoted in FIGURES and in WORDS. In case of any difference in the rates quoted in figures and in words, the lower of the two rates will be taken as the tendered rate. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
- 34) Tenders received after the due date and time of opening, will not be accepted.
- The contractor's responsibility under this contract shall commence from the date of receipt of the LOI by the tenderer. The scheduled period of completion for this work is as mentioned in page No. 01, and the Contractor will have to plan his work accordingly.
- 36) Generally, the maintenance period for any work under NITT will be SIX (6) MONTHS from the date of completion.
- 37) All the documents shall be duly signed with seal in all pages and placed in a common sealed cover duly superscripting the **Name of Work, Tender reference & Date of opening** and submitted.
- Tenderer should furnish the RATE in the enclosed tender "Price Bid" and shall be duly signed with seal in all pages and placed in a separate sealed cover duly superscripting the cover "PRICE BID".
- 39) The Demand Draft towards Document cost & EMD along with complete tender document consisting Technical qualification details but excluding price bid shall be placed in a separate cover duly superscripting the cover "Technical Bid". Tender without EMD or document cost will be rejected.
- 40) Totally there will be 2 Separate sealed covers. One cover containing Document cost, EMD and the tender documents containing Technical Qualifications and the other containing the "Price Bid" both the contents duly signed with seal in all pages.
- Both the above 2 Covers shall be placed in a <u>Common Sealed Cover</u> and submitted before the said due date as given above superscripting the tender No. & Date and Due Date.
- 42) Any deviation to this tender terms & condition and schedules of this tender will cause total rejection of the offer submitted
- 43) Incomplete offers will become liable for rejection.
- Tender addressed to **THE DIRECTOR**, **NIT**, Tiruchirappalli-620 015 will be received up to 15.00 Hrs at the office of the Registrar as per the schedule of tender notice and will be **evf wg** opened at 15.30 Hrs in the presence of those who may choose to attend the tender opening.

Tender submitted by post should be sent superscripting "Register Post with Acknowledgement Due". These should be posted with due allowance for any postal delay. Tender received after due date and time of opening tenders, will be rejected and NIT, Trichy will not be responsible for any postal delay.

46) Earnest Money Deposit:

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. Shall also be furnished in the form of Pay Order or Demand Draft in favour of The Director, NIT Tiruchirappalli. EMD in any other form will not be accepted. The rate of earnest money deposit shall be as under:

Works costing more than Rs.1 lakh

2% of the estimated cost put to tender

EMD of the successful and unsuccessful contractor shall be refunded immediately after finalization of the contractor. EMD shall not carry any interest.

47) Performance guarantee

(1) The successful tenderer, hereafter referred to as the contractor, shall deposit an amount equal to 5% of the tendered and accepted value of the work (without limit) as performance guarantee in the forms of:

Banker's Cheque/Demand Draft/A Scheduled Bank

(2) The time allowed for submission of the performance guarantee by the contractor shall be decided by the NIT approving authority for a period ranging from 4 to 15 days of issue of the letter of acceptance, depending upon the magnitude and/or urgency of the work. A sample copy of the letter of acceptance to the contractor for submission of the performance guarantee is given in Annexure-I.

48) Security Deposit

- (1) The security deposit shall be collected by deductions from the running bill of the contractors at the rate of 2.5% of the gross amount of the bill shall be deducted from each running bill as well as final bill of the contractor.
- (2) The security deposit shall be refunded to the contractor after successful completion of maintenance period of six months. The refund of security deposit and performance guarantee will not carry any interest.
- 49) If the tenderer deliberately gives wrong information in his tender or creates conditions favorable for the acceptance of his tender, NITT reserves the right to reject such tender at any stage.
- 50) The expenses for completing and stamping the agreement shall be paid by the contractor.
- 51) Tenderers shall not increase their quoted rate in case NITT, negotiates for reduction of rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rate originally quoted shall be binding on the tenderers for a period of three months from the date of opening of tenders.
- 52) Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection
- All entries in the tender documents should be in one ink. Erasers and over writings are not permitted. All cancellations and insertions should be duly attested by the tenderer concerned.
- TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attached there to, before submitting their tender.

- 55) Conditional and Unwitnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
- 56) Tenders not submitted on the prescribed form are liable to be rejected.
- 57) This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
- The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for Safety of Contract Labourer in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.
- Agency registered with NSIC is exempted from payment of tender document cost & Earnest Money Deposit but required to attach the attested copy of registration indicating the company name, address, registration number, validity & product for which registered in the technical bid,. Any deviation in the certificate on product or validity or name of the company tendering, will attract rejection resulting non-opening of respective price bid.

60) Compensation for Delay:

If the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contracted or extended period of completion, he shall, without prejudice to any other right or remedy of the NITT on account of such breach, pay as agreed compensation an amount calculated as stipulated below or such smaller amount as may be fixed by the NITT on the contract value of the work for every week that the progress remains below or that the work remains incomplete. This will also apply to items or group of items for which separate period of completion has been specified.

For this purpose the term 'Contract Value' shall be the value at contract rates of the work as ordered and the compensation for delay is by way of recovery at 1 percent of contract value per week of delay provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the contract value or of the contract value of the item or group of items of work for which a separate period of completion is given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the NITT.

61) Arbitration:

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work 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 Director of NITT and if Director is unable or unwilling to act, to the sole arbitration of some other person appointed by the Director, willing to act as such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Estate Officer / Engineer-incharge is expressed in the contract to be final and conclusive. There will be no objection if the arbitrator so appointed is an employee of NITT and that he had to deal with the matters to which the contract relates and that in the course of his duties as such 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 transferred or vacating his office or being unable to act for any reason, Director as aforesaid at the time of such transfer, vacation of office or inability to act, 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. Subject as aforesaid the provision of the Arbitration & Reconciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving 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. The arbitrator(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

The work under the Contract shall, if reasonably possible, continue, during the arbitration proceedings and no payment due or payable, to the Contractor shall be withheld on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of first hearings. The arbitrator shall give a separate award in respect of each dispute or difference referred to him. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion. The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply or its amendments for arbitration shall be applicable.

Force Majeure clause: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non-performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by NITT subject to prompt notification by the tenderer to NITT of the particulars of the events and supply to the NITT if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

The correspondence exchanged against the tender from both tenderer and NITT through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.

Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.

In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the tenderer the LOI is said to have been issued within the validity period and shall be bidding on both the parties to the business.

Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to NITT. If no such details are mentioned in the offer then it will be construed that the subject tenderer is not under any such hold. But at a later date if it comes to the notice of NITT about any such hold under enforcement on the subject tenderer, NITT will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalisation of the subject tender irrespective of the status of the subject tenderer in that tender. Such tenderers will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.

GENERAL CONDITIONS OF CONTRACT

- 1. No night work will be permitted without the written permission of the Engineer in charge.
- Items of work other than those mentioned in the Bill of Quantities (Tender Schedule) attached hereto will be carried out at the rates to be fixed by this organization as per relevant clauses of CPWD Works Manual.
- 3. Permission for erection of temporary work sheds etc., at site will have to be obtained from NITT in writing in advance.
- 4. The works contract to be entered into with the successful tenderer will be governed by the CPWD works Manual 2012 or the latest in force.
- 5. The successful tenderer / Contractor shall observe all safety regulations and take necessary safety precaution as called for and Safety Precautions enclosed herewith.
- 6. In all matters of dispute, the decision of the Director, National Institute of Technology, Tiruchirappalli -620 015. Shall be final and binding on the tenderer / contractor.
- 7. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The rate quoted shall be deemed to be inclusive of all such contingencies.
- 8. All the materials to be used in the work and nature of work shall conform to respective CPWD, BIS and National Buildings Organisation Standard Specifications and shall be got approved by the Engineer in charge before actual incorporation in the work.
- 9. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work
- 10. Engineer in charge / Civil or his duly authorized representative shall have all reasonable times access to Contractor's premises of work and shall have the power at all the reasonable times to inspect and test any portion of the work or examine the materials and workmanship of the structures during their manufacture and test. The contractor shall give due notice in writing to the Inspecting Engineer of NITT when the materials supplied to be incorporated in the work are ready for Inspection and test. No material shall be incorporated in the work until the inspecting Engineer certified in writing that such materials have been inspected and approved by him or else the rejected material should be removed from site immediately.
- 11. The Contractor shall closely scrutinize all the drawings issued in connection with the work by this organization and bring to the notice of the Engineer-in-charge if any discrepancies, omissions in the drawings before undertaking the actual work pertaining thereto.
- 12. The contractor should submit in advance every fortnight a detailed programme of work to be undertaken from time to time strictly in conformities with the "Time and Progress Chart" covering the entire constructed work and reschedule them wherever necessary during the progress of the work so as to achieve the target set.
- 13. The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.

GENERAL SAFETY PRECAUTIONS TO BE FOLLOWED AT WORK SITE DURING EXECUTION

The following safety measures should be strictly adhered to, during execution of works at sites.

- 1. Providing the working platform with toe board and handrail for continuous working at heights.
- 2. Providing safety belt and life line at all times for men working at heights.
- 3. Providing dust or fume respirator in places where dust and fume concentration exists.
- Providing goggles and welding screens.
- 5. Providing acid and alkali proof rubber gloves for handling acid and alkali and chemical which are corrosive.
- 6. Providing rubber gloves for working on electrical works.
- Ensuring proper lashing of the components while being transported in vehicles.
- 8. The vehicles must have side supports or have body to support the materials conveyed.
- The materials should not be allowed to extend or overflow the sides of the vehicles.
- 10. Materials should not be allowed to overhang from the rear edge of the body of the vehicle.
- 11. Driver of the vehicle must possess license.
- 12. Vehicle must not be overloaded prescribed limits.
- 13. Red flags and lights for parts projecting from the body of vehicle must be provided.
- 14. The speed restrictions within the Institute must be strictly adhered to.
- 15. The gas cylinders must be always handled on trolleys or kept tied down not in use. They should never be rolled as Roller for conveying.
- 16. Cylinders should not be used without regulators.
- 17. All excavations must be barricaded and red lamps must be provided.
- 18. All electrical connections must be properly earthed.
- 19. Providing helmet, safety belt, etc., for high level work and sufficient number of Industrial Safety nets at appropriate level to safeguard the persons working at high level particularly in roofing etc.,
- 20. All personal protective equipment conform with standard specification and Contractor including their sub-contractors, agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measurers. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

SAFETY PRECAUTIONS TO BE OBSERVED WHILE TRANSPORTING MATERIALS

I. VEHICLE

- 1. Vehicles carrying material should have proper registration documents and must be produced on demand by our Security Staff.
- 2. The light on right side, i.e., over the driver's cabin shall be in working condition.
- 3. Both the head lights as well as park lamps must be in working conditions.

II. MOVEMENT OF VEHICLE

- 1. The vehicle should not travel at more than 20 km.ph in our premises.
- 2. The Driver of the vehicle must possess heavy duty license and produce on demand by the Security Staff.
- 3. Vehicles carrying inflammable liquids in the tank containers should have grounding chain or the tank should be coated with insulating material also to avoid Static Electricity.
- 4. In road junctions, speed breakers and railway crossing, the speed should be lowered and vehicle should proceed cautiously.
- 5. The driving should 'KEEP TO THE LEFT' at all places.
- 6. The vehicle should not be parked in road which could obstruct the vehicular traffic.
- 7. No person other than driver should be allowed to sit or stand on the prime mover or trailer.
- 8. The vehicle should pass only through the approved routes. Short cuts should be forbidden.
- 9. There must be a safe distance behind another moving truck.
- 10. The driver should avoid making quick starts, jerky stops or quick turns at excessive speed.

TERMS AND CONDITIONS REGARDING COMPLIANCE WITH VARIOUS LABOUR LAWS BY THE CONTRACTORS FOR NITT

- 1. The Contractor shall not employ in connection with the work any person who has not completed 18 years of age.
- 2. The Contractor shall in respect of labour employed by him either directly or through subcontractors, comply with or cause to be complied with the following statutory provisions and rules and in regard to all matters provided therein.
 - a) The Contract Labour (Regulation & Abolition) Act 1970
 - b) The Minimum Wages Act 1948 and related Central Rules.
 - c) The Payment of Wages Act 1936 and related Central Rules.
 - d) The Employee's Provident Fund & Miscellaneous Provisions Act 1952.
 - e) The Employees State Insurance Act 1948.
 - f) The Workmen Compensation Act 1923.
 - g) The Industrial Disputes Act 1947.
 - h) The payment of bonus act 1965

And any other law or modifications to the above or to the Rules made thereunder from time to time.

3. The Contractor employing 20 or more workmen is required to obtain license from the authorities (The Deputy Chief Inspector of Factories / Assistant Commissioner of Labour as the case may be). The license shall be amended and / or renewed wherever, there is an increase in the workmen employed by him or in the event of contract being extended or renewed. The Contractor shall inform the license number to the NITT Management before taking up the work.

4. The Contractor (Licensed or unlicensed) shall promptly furnish every information and document required by NITT authorities for the purpose of fulfilling their obligations as Principal Employer and shall render all necessary assistance for the same.

WAGES

- 5. The Contractor shall pay wages to the workmen employed by him at the rate which shall not be less than the minimum wages applicable under Law from time to time.
- 6. The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall exceed one month.
- 7. The Contractor shall ensure payment of wages to the contract labour employed by him within three days from the end of wage period in case the wage period is one week or a fortnight and in all other cases before 7th day of the following month.
- 8. All Payment of wages shall be made on working days at the work site and during the working time and on date notified in advance. In case the work is completed before the expiry of the wage period final payment shall be made within 48 hours of the last working day.
- 9. Where the employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the second working day from the day on which his employment is terminated.
- 10. Wages due to every worker shall be paid to him direct or to the person authorized by him in this behalf. All wages shall be paid in current coin or currency in both.

REGISTERS & RECORDS: -

11. The Contractor shall maintain all registers and records in the proper manner and as required by the regulations of the various authorities concerned and indemnify the Employer from the consequences due to any inaccurate or faulty documentation on the part of the Contractor.

POST TECHNICAL AUDIT OF WORK AND BILLS:-

12. NITT reserves the right to carry out the post-payment Audit and technical examination of the work and final bill including all supporting vouchers, abstracts etc., and enforce recovery of any sum becoming due as a result thereof in the manner provided in the presiding subparagraphs. Such recovery shall be enforced any time even after passing the final bill.

SUBMISSION OF BILLS BY CONTRACTOR: -

- 13. The Contractor at the end of each month shall submit a bill in triplicate, if required, detailing the various items of work done during the month supported by the requisitions issued from time to time. The Contractor shall, once in every month, submit to the EO / EMD separately details of his claims for the work done by him up to and including the previous month which are not covered by his contract agreement in any of the following respects:
 - a) Deviation from the items provided in the contract documents.
 - b) Extra items / new items of work.
 - c) Items in-respect of which rates have not been settled. He should in addition furnish a clear certificate to the effect that the claims submitted by him as aforesaid cover all his claims and that no further claims shall be raised by him in respect of the work done upto and including the period under report.

PAYMENT OF BILLS:-

14. All payments to be made to the Contractor, under this contract shall be by NEFT or RTGS within a reasonable time, after the certification of bills by the execution department.

RECOVERY FROM CONTRACTOR:-

15. Whenever under the contract, any sum of money, shall be recoverable from or payable by the Contractors, the same may be deducted from or any sum then due or which at any time thereafter may become due to Contractor under the contract or under any other contract with NITT or from his Security Deposit or he shall pay the claim on demand.

CANCELLATION OF CONTRACT FOR CORRUPT ACTS:-

16. NITT, whose decision shall be final and conclusive, shall without prejudice to any other right or remedy which shall have accrued shall accrue thereafter to NITT cancel the contract in any of the following cases and the Contractor shall be liable to make payment to NITT for any loss or damage resulting from any such cancellation to the same extent as provided in the case of cancellation for default.

If the Contractor shall:-

a) Offer or give or agree to give to any person in NITT service any gift or consideration of any kind, as an inducement or reward for doing or for bearing to do or for having done or for borne to do any act, in relation to the obtaining or execution of this or any other contract for NITT service,

OR

b) Enter in to a contract with NITT in connection with which commission has been paid or agreed to be paid by him or with his knowledge, unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to NITT.

OR

c) Obtain a contract with NITT as a result of ring tendering or by non-bonafide methods of competitive tendering, without first disclosing the fact in writing to NITT.

CANCELLATION OF CONTRACT FOR INSOLVENCY ASSIGNMENT OF TRANSFER OR SUB-LETTING OF CONTRACT:-

- 17. NITT, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to NITT shall cancel the contract in any of the following cases:

 If the Contractor,
 - (a) Being an individual or if a firm any partner thereof shall at any time be adjudged bankrupt or have a receiving order for administration of his estate, made against him or shall take any proceedings for liquidation or composition under any bankruptcy Act or assignment of his effects of composition or arrangement for the benefit of his creditors or purport to do so, or if any application made under any

Bankruptcy Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him on behalf of his creditors

OR

(b) Being a Company, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a receiver or Manager on-behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or Manager,

OF

- (c) Assigns, Transfers, Sub-lets or attempts to assign, transfer or sub-let any portion of the work without the prior written approval of the NITT.
- (d) Whenever NITT exercise the authority to cancel the contract under this conditions, NITT may have the work done by any means at the Contractor's risks and expenses provided always that in the event of the cost of the work so done (as certified by Engineer in charge which is final and conclusive) being less than the contract cost, the advantage shall accrue to the NITT and if the cost exceeds the money due to Contractor under the

- contract, the Contractor shall either pay the excess amount ordered by Estate Maintenance Dept. or the same shall be recovered from the Contractor by other means.
- (e) In case the NITT carries-out the work under the provisions of this condition the cost to be taken into account in determining the excess cost to be charged to the Contractor under this condition shall consist of the cost of the materials, hire charges of tools and plants and/or labour provided by the NITT with an addition of such percentage to cover superintendence and establishment charges as may be decided by Estate Maintenance Dept., whose decision shall be final and conclusive.

CANCELLATION OF CONTRACT IN PART OF FULL FOR CONTRACATOR'S DEFAULT:

18. If the Contractor:

- (a) makes default in carrying out the work as directed and continues in that state after a reasonable notice from Engineer in charge or his authorised representative
- (b) fails to comply with any of the Terms and Conditions of the contract or after reasonable notice in writing with orders properly issued thereunder
- (c) NITT may without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to NITT, CANCEL the contract as whole or in part thereof or only such work order or items of work in default from the contract. Whenever NITT exercise the authority to cancel the contract as whole or part under this condition NITT may complete the work at the contractor's risk and cost (as certified by Engineer in charge, which is final and conclusive) being less than the contract cost, the advantage shall accrue to the NITT. If the cost exceeds the moneys due to the Contractor under this contract the Contractor shall either pay the excess amount ordered by Estate Maintenance Dept. or the same shall be recovered from the Contractor by other means. In case the NITT carries out the work or any part thereof under the provisions of the conditions the cost to be taken into account in determining the excess cost to be charged to the Contractor under this condition shall consist of the cost of the materials, hire charges of tools and plant and/or labour provided by the NITT with an addition of such percentage to cover the superintendence and establishment charges as may be decided by the Engineer in charge, whose decision shall be final and conclusive.

TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR. :-

19. Without prejudice to any of the rights or remedies under this contract, if the Contractor dies, or if the firm is dissolved or the company is liquidated, NITT shall have the option of terminating the contract without compensation to the Contractor.

SPECIAL POWER TO TERMINATION:-

20. If at any time after the award of contract, NITT shall for any reason whatsoever not require whole or any part of the work to be carried out the Engineer in charge shall give notice in writing of the fact to the Contractor who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the fore-closing of the work.

LABOUR:-

21. The Contractor shall remain liable for the payment of all wages or other moneys to his work-people or employees under the payment of Wages Act 1936, Employees Liability Act. 1938, Workmen's Compensation Act 1923 or any other Act or enactment, relating thereto and rules framed, thereunder from time to time.

PRECAUTIONS AGAINST RISK:-

22. The Contractor shall be responsible for providing at his own expense for all precautions to prevent loss or damage from any and all risks and to minimize the amount of any such loss or damage and for the necessary steps to be taken for the said purpose.

23. Rate for additional item / substituted item:

This will be as per the rate analysis based on the market rate for material and labour prevailing at the time of execution at place of work as ascertained by Engineer in charge raised to the overall tender percentage at which the work was awarded to cover overheads / establishment/ profit.

24. Corrigendum / Amendment:

It is tenderer's responsibility to watch for any corrigendum or amendment till the opening of a particular tender that will be posted only at NITT web site.

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

Web: www.nitt.edu Phone: 0431 –250 3830



PRICE BID

Renovation work to Gents & Ladies Toilets

Name of work : (Total: 6 Nos) in ECE Department at Silver

Jubilee Building.

Value of work : Rs.12,32,289/-

Tender Enquiry: NITT/EMD/EE/CIVIL/IZ/Enq.No32(235)

No. Dt:26.04.2018

Period of Contract : 90 days

SCHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK:

SI. No.

DETAILS & QUANTITIES of each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work (in figures and words) Rs. Ps.	Period of contract
1.	Renovation work to Gents & Ladies Toilets (Total: 6 Nos) in ECE Department at Silver Jubilee Building.	Rs.12,32,289/- (Rupees Twelve lakh Thirty Two Thousand Two Hundred Eighty Nine only).	90 Days

		BILL OF Q	UANTITIES	<u> </u>		
App	rox. Qty.	Description of	TNBP	Rate (Both in Unit	Amour	nt
		work	No.	fig & Words	Rs.	Ps.

AS PER SEPARATE SHEETS ATTACHED CONTAINING 19 PAGES

FROM SERIAL No. 19 TO 37

BILL OF QUANTITIES

Name of Work: Renovation work to Gents & Ladies Toilets (Total : 6 Nos) in ECE Department at Silver Jubilee Building

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:					
1.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	2	cum			
2	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits.	26	sqm			
2.1	50 mm thick		•			
3	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 :	3	cum			
3.1	Cement mortar 1:6 (1 cement : 6 coarse sand)					
4	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.	10	sqm			
4.1	Granite Stone of approved shade					
5	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:	20	aa-1-			
5.1	200x10 mm		each			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
6	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:	40	each			
6.1	100 mm					
7.1	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing	18	sqm			
	Providing and fixing stainless steel (Grade 304) railing made of Hollow					
8	tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	100	kg			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
9	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.	20	20			
9.1	40 mm thick with 20 mm nominal size stone aggregate	20	sqm			
10	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	150	sqm			
11	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion.	15				
11.1	Shoe (Plain)	15	15 each			
11.1.1	75 mm Shoe					
11.1.2	110 mm Shoe	2	each			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
12	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete	50	each			
12.1	75 mm					
12.2	110 mm	30	Each			
13	12 mm cement plaster of mix :	10	Sqm			
13.1	1:6 (1 cement: 6 fine sand)		~ 1			
14	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work	335	sqm			
14.1						

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
15	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 metres lead:	50	sqm			
15.1	With cement mortar 1:4 (1 cement : 4 fine sand)					
16	White washing with lime to give an even shade:					
16.1	Old work (two or more coats)	175	sqm			
17	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	335	sqm			
18	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade One or more coats on old work					
18.1	One of more coals on our work	140	sqm			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
19	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.	100	sqm			
20	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.					
20.1	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	2	cum			
21	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge					
21.1	In cement mortar	3	cum			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
22	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:	12	each			
22.1	Of area 3 sq. metres and below					
23	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	92	Sqm			
24	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge:	90	metre			
24.1	15 mm to 40 mm nominal bore					
25	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:	3	3 each			
25.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests					

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
26	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:	21	each			
26.1	W.C. pan with ISI marked white solid plastic seat and lid					
27	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required	18	each			
27.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern					
28	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:	18	each			
28.1	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	10	Cacii			
29	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
29.1	Semi rigid pipe	18	each			
29.1.1	40 mm dia					

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
30	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	6	each			
31	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.	6	each			
31.1	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.					
32	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	170	metre			
32.1	20 mm nominal outer dia Pipes					
32.2	25 mm nominal outer dia Pipes	200	Metre			
32.3	40 mm nominal outer dia Pipes	15	Metre			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
33	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)	19	Each			
33.1	25 mm nominal bore					
34	Providing and fixing uplasticised PVC connection pipe with brass unions :	21	Each			
34.1	45 cm length					
34.1.1	15 mm nominal bore					
35	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):	19	Each			
35.1	25 mm nominal bore					
36	Providing and fixing PTMT bib cock of approved quality and colour.	24	Each			
36.1	15 mm nominal bore, 122mm long, weighing not less than 99 gms					

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
37	Providing and fixing PTMT stop cock of approved quality and colour.					
37.1	20 mm nominal bore, 89 mm long, weighing not less than 88 gms	57	each			
	De l'Ille et l'écont de l'écont d					
38.1	Providing and fixing PTMT grating of approved quality and colour. Circular type	25	Each			
38.1.1	100 mm nominal dia					
39	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:					
39.1	100x100 mm size P type	8	Each			
39.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5					

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
40	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:	3	Each			
40.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):					
40.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5					
40.2	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg):	1	Each			
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5					
40.2.1						
41	Extra for depth for manholes:	1.5	Metre			
41.1	Size 90x80 cm					
41.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5					

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
41.2	Size 120x90 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5					
41.2.1		0.5	metre			
42	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality					
42.1	L D- 2.5	4	each			
42.1.1	Rectangular shape 600x450 mm internal dimensions					
43	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying: a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	35	Sqm			
44	Providing and fixing of 40mm dia Unplasticised PVC pipes including all fittings i/c fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step UPVC solvent cement and testing of joints complete as per the direction of Engineer-in-charge.	40	Metre			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
45	Providing and fixing of 75mm dia (Finolex or Avonplast-6kg/cm2) unplasticised Rigid PVC soil pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes	130	Metre			
46	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC Door TEE (Finolex or equivalent make)	30	Each			
47	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC plain elbow (Finolex or equivalent make)	10	Each			
48	Providing and fixing of 110 mm dia (Finolex or Avonplast-6kg/cm2) unplasticised Rigid PVC soil pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes	60	Metre			
49	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC Door elbow (Finolex or equivalent make)	20	Each			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
50	Providing and fixing PVC cowl to the PVC pipes etc complete as per the direction of Engineer-in-charge.	2	Each			
50.1	75 mm Cowl					
50.2	110 mm Cowl	2	Each			
51	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) 110 mm dia PVC single door 'Y' (Finolex or equivalent make)	2	Each			
52	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) 110 mm dia PVC double door 'Y' (Finolex or equivalent make)	2	Each			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
53	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 110 mm door 'L' (Finolex or equivalent make)	2	Each			
54	Providing and laying rectified Anti skid Ceramic floor tiles of size 380x380 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement: 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	45	Sqm			
55	Attending to leak at roof slab and wall joint. The scope of work includes clearing the tiles terrace surfaces to be free of dust, loose particles, algae growth and atmospheric deposits, filling small blow holes if any with CERAFIL 45/TEC TILE 12/Sika Grout/NACC Tile Grout/Dr.Fixit Crack-x and providing primer and top coat of CERAFLEX/TEC WAVE 3000/Sika raingard/NACC High Flex single component/Dr.Fixit new coat highly flexible membrane coating including curing adequately. All as per manufactures recommendation/standard specifications and instructions of Engineer-in-charge. rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidential charges etc complete for in accessible areas. one primer and two top coats.	60	Sqm			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
56	Providing one coat of CERALASTIC/TECH WAVE 2000/Sika raingard/NACC roof coating/Dr.FIXIT PDIDFIN 2K water proofing membrane coating followed by one bond coat of CERA BOND SBR /TEC BOND SBR/Sika latex/NACC latex/Dr.Fixit Pidicrete urp sbr latex over the membrane coating and providing cement plastering 6mm thick in CM LATEX over the membrane coating and providing cement plastering 6mm thick in CM 1:4 admixed with general purpose water proofing compound of respective products and curing adequately.All as per manufacturers recommendation/standard specifications and instructions of Engineer-in-charge.The scope of work includes dismantling the existing damaged weathering course and tiles to expose to the RCC slab and finishing to match with the existing weathering course. Rate quoted includes cost of all materials except cement which will be issued free of cost at BHEL stores, labour charges, conveyance, tools and all other incidental charges etc complete. Replacing the damaged tiles and repointing where ever required which will be paid under separate item for accessible areas. (cement consumption = 2.74 kg/sqm)	60	Sqm			
57	Attending Crack filling at parapet level with out pressure grouting. The scope of work includes routing the cracks with a mechanically operated groove cutter and sealing the groove with flexible sealant-CERA CRACK FILLER/TEC KRACK FILLER Sika CRACK SEAL/NACC CRACK FILLER/Dr.Fixit Crack-X paste and providing two coats of CERAFLEX/TEC WAVE 3000/Sika RAIN GARD/NACC ROOF COATING/Dr.FIXIT NEW COAT highly flexible membrane for a width of 10cms aligned to the centre of the crack. All as per /manufactures recommendations/standard specifications and instructions of Engineer-incharge. rate quoted includes coat of all materials , labour charges,conveyance, tools and all other incidential charges etc complete.	40	Metre			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
58	Drilling pockets and fixing PVC Nipples in position along weak concrete junctions and leakage points in walls/floor and pressure grouting CERA EXPAN 250/TEC SWELL/Sika INTRA PLAST/NACC EXPAN/Dr.FIXIT PIDICRETE AM 250 expansive grouting additive admixed with cement slurry using hand operated grouting pump. The scope also includes plugging the grout hole with CERA PLUG/TEC STOP/Sika HYDRO PLUG/NACC PLUG/Dr.FIXIT INSTANT LEAK PLUG. All asper manufactures recommendations/standard specifications and instructions of Engineers-in-charge. Rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidental charges except cement which will be issued free of cost at NITT stores. (CEMENT CONSUMPTION = 0.35KG/POINT)	20	Point			
59	Providing one coat of Antifungal coating-tec tough/Cera re-played/Sika Multi guard or Sika gard 67/NACC acrylic/Dr.FIXIT DAMPGUARD-protective and decorative coating system as per manufactures recommendations/standard specifications and instructions of Engineer-in-chagre. The scope of work includes surface preparations including cleaing the wall surfaces to be free of previous coatings, dust loose particles, algae growth and atmospheric deposits, filling small blow holes if any with puty,. Rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidentials charges etc complete.	35	Sqm			
60	Dismantling the exisiting water closet without damaging the existing sewer line etc complete	24	Each			

ITEM NO	SUB-HEADS AND ITEM OF WORK	QUANITITY	UNIT	RATE (RS.)	RATE (IN WORDS)	AMOUNT (RS.)
61	Providing & fixing circular PVC floor trap to pvc pipe etc complete.	5	Each			
62	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 90 mm dia PVC Pipe	120	Metre			

Total Amount in Words (\mathbf{D}_{G}
Total Amount in words (Rsonly

Contract Agreemer	nt
	TENDER
То	
The Director, National Institute of Techno TIRUCHIRAPPALLI –620 0	
I / We hereby offer to c	arry out the work of
I / We hereby carefully per and agree to abide by the s	rused the following documents connected with the above noted world same.
1.Specifications (General & 2.Drawings 3.Schedule 'A', 4.Bill of Quantities 5.CPWD works Manual in form	
Money, which shall be refusuch sum which along with 50% of the fully Security De	erewith the sum of Rsas Earnes unded should this tender be rejected. I / We further agree to deposit the sum of Rsmentioned above shall make upposit for this work as provided for under conditions of the NATIONAL DGY General Conditions of Contract.
terms & conditions contain Quantities thereto and to	e to execute all the work referred to in the said documents upon the ned or referred therein and as detailed in Schedule 'A' and Bill of carry out such deviations as may be ordered, vide conditions of the a maximum of 30% of the tendered amount of
	to refer all disputes, as required to the sole arbitration of an Officer, to tor, NITT., in his sole discretion whose decision shall be final and
WITNESS	Signature of the Contractor
	Date:

2.

Contact Number: Invoice				
То		Information		
THE DIRECTOR NATIONAL ISNTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015		Invoice No :		
		Invoice Date :		
		GST No. :		
		PAN No. :		
		TIN No. :		
		PF No. :		
		ESI No. :		
SL.NO.	IO. DESCRIPTION		AMOUNT (RS.)	
	TOTAL AMOU	INT (RS.)		

Name of the Company:

Address: