



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008 (ODISHA)**

An Institute of National Importance under Ministry of HRD, GOI

e- NOTICE INVITING TENDER(e-NIT)

Tender Notification No: NITR/PW/EM/2020/52

Dated: 18/04/2020

The National Institute of Technology, Rourkela invites sealed bids from the eligible bidders / registered Civil contractors for **External painting of Academic and Hostel Buildings.**

Last date of Submission of Bid : **14/05/2020 by 11:00 AM**

Opening date of Bid(Cover I) : **15/05/2020 at 11:00 AM**

For Details:

http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/7Construction/Default.aspx

Contact: (i) **Mr. Joydip Mondal, EE(Civil);**

Ph: 0661-2462071;

Email: mondalj@nitrkl.ac.in

Bidding Through: e-Procurement Portal of Ministry of HRD, Govt. of India

<https://mhrd.euniwizarde.com/>

**Sd/-
REGISTRAR**



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008, ODISHA**

OPEN TENDER NOTICE NO.: NITR/PW/EM/2020/52

Dated: 18/04/2020

Tender for External painting of Academic and Hostel Buildings.

Sealed tenders are invited through e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/> from reputed civil contractors of appropriate class having valid registration with PWD (Orissa State) / CPWD / PSUs / NITR having sound financial status, machinery, resources and experience in execution of similar works i.e. finishing work, wall putty, painting.

Name of work	Estimated cost	EMD	Time of completion
External painting of Academic and Hostel Buildings.	24991090.00	499822.00	9 Months

- 1. Eligibility Criteria:** - Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - Should have successfully completed similar works during the last three years at least
 - One similar completed work costing not less than Rs.80.00 lakhs.
Or
 - Two similar completed work costing not less than Rs.50.00 lakhs.
Or
 - Three similar completed work costing not less than Rs.40.00 lakhs.
 - Should have average annual financial turnover of Rs.35.00 lakhs during last three years ending 31st March 2019
- Bids on **overall cost plus/minus percentage basis** are invited in the prescribed form.
- The firm should not have been black listed at any time. To this effect, an undertaking is to be given in the prescribed format.
- Bid Security (EMD) and Tender Cost: EMD (Earnest Money Deposit) need to be submitted through online portal only for **INR 499822/- (Rupees Four lakh ninety nine thousand eight hundred twenty two only)** and Tender cost (Non-refundable) through online mode for **INR 500/- (Rupees Five hundred only)**. The EMD (Earnest Money Deposit) of unsuccessful bidders should be returned to them at the earliest and latest on or before the 30th days after the award of the contract. EMD shall bear no interest. Any bid without accompanying with EMD & Tender Cost is liable to be treated as non-responsive and rejected.
- Detailed advertisement including tender documents is available in our website https://nitrkl.ac.in/OldWebsite/Jobs_Tenders/7Construction/Default.aspx and send your quotations through e-Procurement Portal of Ministry of HRD Portal <https://mhrd.euniwizarde.com/>
- The submission of bids by the tenderer should be addressed to the Registrar, National Institute of Technology, Rourkela in three separate sealed Envelopes.

Tender for External painting of Academic and Hostel Buildings

(Tender Notice No – NITR/PW/EM/2020/52 dated: 18/04/2020)

Due on 14/05/2020 by 11:00 AM

Opening date of Bid (Cover I): 15/05/2020 at 11:00 AM

Cover No-I:- The envelope marked as '**Techno-Commercial Bids**' shall contain prequalification requirements in NIT format (**Form-B, C & D**), other documents mentioned in checklist attached to the tender signed and stamped on all pages confirming acceptance.

Cover No –II: - The price bid need to submit through BOQ.

7. Important Dates

- a. Last date of submission of tender on 13/05/2020 by 11:00 AM through e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/>
- b. Opening of Bid (Cover I) of the tender on 14/05/2020 by 11:00 AM through e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/>
- c. EMD and Cost of Tender need to be submitted through online mode of e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/> only.
8. The prequalification shall be based on an objective evaluation of details regarding past performance in specific job areas, technical and financial capabilities and resources of the contractors including possession of appropriate equipment for the type of work etc. and with proven track record and will be evaluated by the NIT. Bidders are advised to enclose details of experience; status of Engineers employed and equipment at their disposal in each area of specialization. Bidders must make arrangement for inspection of their recent construction sites by NIT officials to ascertain their quality of construction.
9. The time of completion is firm, and penalty under liquidated damage clause will be charged for any delay in work.
10. A Pre-Bid meeting will be held on **08/05/2020 at 03:00 PM** at the **Board room of NIT, ROURKELA** where all queries of bidders will be clarified.
11. The validity of the tender shall be **270 days** from the date of opening of the bids. **The job may be awarded to more than one firm at lowest finalized tender rate.**
12. Details including our prescribed format for prequalification, BOQ, General condition and special condition of contract etc. are available in our website at http://nitrkl.ac.in/oldwebsite/job_Tenders/construction/Default.aspx and through e-Procurement Portal of Ministry of HRD Portal <https://mhrd.euniwizarde.com/>
13. Each page of the tender documents should be signed by the authorized person or persons submitting the tender as token of his/her having acquainted himself/themselves with the general and special condition of contract, specifications etc. as laid down. Any tender with any of the documents not so signed will be subjected to rejection.
14. NIT reserves the right to qualify or deny prequalification of any or all applicants without assigning any reasons.
15. You are requested to deposit 2.5 % of contract value minus the EMD amount of already deposited by you along with the tender document) towards initial security deposit in favour of NIT, Rourkela in the form of crossed local cheque or demand draft on any nationalized bank, payable at Rourkela and balance SD @7.5 % shall be deducted from your running bills. The security amount will be retained with the institute till the maintenance period is over after the date of completion of the job. On due satisfactory performance and completion of the contract in all respect, the security deposit will be returned to the contractor, otherwise the SD will be forfeited.

16. INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bid electronically on the e-Wizard Portal (<https://mhrd.euniwizarde.com/>) using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the e-Wizard Portal, prepare their bids in accordance with the requirements and submitting their bids online on the e-Wizard Portal. For more information, bidders may visit the e-Wizard Portal <https://mhrd.euniwizarde.com/>

16.1 REGISTRATION PROCESS ON ONLINE PORTAL

1. Bidders to enroll on the e-Procurement module of the portal <https://mhrd.euniwizarde.com> by clicking on the link "Bidder Enrollment". Enrolment on the e-wizard Portal.
2. The bidders to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the e-Wizard Portal. Bidders to register upon enrolment their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India with their profile.
3. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. Foreign bidders are advised to refer "DSC details for Foreign Bidders" for Digital Signature requirements on the portal.
4. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
5. Bidders must ensure that they have the latest version of Java installed in their local system.
6. The scanned copies of all original documents should be uploaded in pdf format on portal <https://mhrd.euniwizarde.com>
7. After completion of registration payment, you need to send your acknowledgement copy on our help desk mail id ewizardhelpdesk@gmail.com for activation of your account.

16.2 TENDER DOCUMENTS SEARCH

1. Various built in options are available in the e-Wizard Portal to facilitate bidders to search active tenders by several parameters. These parameters include Tender ID, organization, location, date, value, etc.
2. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the Online Portal.
3. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the Online Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
4. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

16.3 BID PREPARATION

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
4. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / PNG etc. formats. Bid documents may be scanned with 100 dpi with black and white option.

16.4 BID SUBMISSION

1. Bidder to log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder to select the payment option as Online" to pay the tender fee/ EMD wherever applicable and enter details of the instrument.
4. A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the prescribed format and no other format is acceptable. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the unprotected cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

16.5 AMENDMENT OF BID DOCUMENT

At any time prior to the deadline for submission of proposals, the institutions reserve the right to add/modify/delete any portion of this document by issuance of a Corrigendum, which would be published on the website and will also be made available to the all the Bidder who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

16.6 ASSISTANCE TO BIDDERS

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. e-Procurement support any queries relating to the process of online bid submission or queries relating to e-Wizard Portal in general may be directed to the **24x7 e-Wizard Helpdesk. The contact number for the helpdesk is 011-49606060, 23710092, 23710091, Er Sanjeet Kumar Jha (+91-8882495599), 9355030626. Amit Kumar Jha 9355030627, 9205898226**

Email Support:

For any eProcurement Application Service Requests and Technical issues related to Document Uploads, Tender Publishing, Issue of Corrigendum, Encryption/Decryption Key issues, Bid Evaluation, Bidder Login issues, New Registration issues, Key Uploads, DSC Key installation, Bid Submission, system users may please mail to Sanjeet Kumar Jha ewizardsanjeet.kumar@gmail.com

REGISTRAR
NIT, Rourkela
Fax No- 0661-2462022
Ph. No -0661-2462021

CHECK LIST FOR PRE-QUALIFICATION

Forms to be filled in properly:

1. Form-A: This form (check list)
2. Form-B: Letter of Transmits
3. Form-C
4. Form-D
5. Photocopy of documents to be attached.
 - a) Valid license
 - b) Work orders executed of last 3 years.
 - c) VAT clearance certificate up to last year, PAN Card and GST Registration.
 - d) Performance report from authority/officer having rank not below Executive Engineer with specific mention about the project components, scheduled and actual time of completion, final project value etc. to be submitted.

(Signature of the Agency)

PRE-QUALIFICATION INFORMATION

LETTER OF TRANSMITTAL
(To be typed on the Agency's Letterhead)

To

**THE REGISTRAR
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA- 769008**

SUB: External painting of Academic and Hostel Buildings.

Sir,

Having examined the details of pre-qualification document, I hereby submit the pre-qualification documents and other relevant information.

1. I hereby certify that all the statements made and information supplied in the enclosed forms A to D and accompanying statements are true and correct to the best of my knowledge. I understand that if any information found incorrect, the application is liable to be cancelled.
2. I have furnished all information and details necessary for pre-qualification and have no further pertinent information to supply.
3. I certify that my firm is not blacklisted/ banned from business by any organization.
4. I hereby accept the rules and procedures of the Institute for pre-qualification of Contractor and agree that the Institute has the right to accept or reject any application without assigning a reason thereto.

(Signature of the Agency)

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

APPLICATION FOR PRE-QUALIFICATION

1. Name of Agency/ Firm: - _____

2. Address: - _____

3. FAX/Telephone Number: - _____

4. Special Qualification for technical Person: _____

5. Details of Registration:

6. Volume of business in last three financial years:

2016-17 Rs _____

2017-18 Rs _____

2018-19 Rs _____

7. Important jobs executed in Govt. /PSU including specifications, materials used etc.

8. Field of Specialization.

9. Valid Income Tax clearance certificate (ITCC).

10. Any other information regarding technical capability.

(Signature of the Agency)

Annexure to Application for Pre-Qualification

WORKS COMPLETED AND IN PROGRESS DURING THE LAST 5 YEARS (INCLUDING ALL WORKS AWARDED)

{ADD ADDITIONAL SHEETS, IF NECESSARY}

Sl.No.	Name of Work & Agreement No	Date of Completion		Tendered Cost	Complete address of the Authority for whom the Work was done
		Stipulated	Actual		

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

**GENERAL CONDITIONS
OF
CONTRACT**

GENERAL CONDITIONS OF CONTRACT

I N D E X

Clause Nos.	Description
1.0	Definitions & Interpretation
1.01	Definitions
1.02	Specifications
2.0	Engineer's Representative
3.0	Assignment and Subletting
4.0	Extent of Contract
5.0	Contract Documents
6.0	General Obligations
6.01	Contract Agreement
6.02	Security Deposit
6.03	Work to the Satisfaction of Engineer
6.04	Programme
6.05	Contractor's Superintendence
6.06	Contractor's Employees
6.07	Setting out of the works
6.08	Use of Explosives
6.09	Watching and Lighting
6.10	Care of Works
6.11	Accident or Injury to workmen
6.12	Workmen's Compensation
6.13	Giving Notice
6.14	Compliance of Status & Regulation
6.15	Opportunity for other Contractors
6.16	Supply of Plant, Materials and Labour
6.17	Site Clearance on completion of Work
7.0	Labour
8.0	Work Materials and Plant
8.01	Quality of Materials and Tests
8.02	Access to Site
8.03	Removal of improper works and material
9.0	Commencement Time & Delays
9.01	Commencement of Work
9.02	Time for Completion
9.03	Extension of Time for Completion
9.04	Rate of progress
9.05	Liquidated Damages

9.06	Certificate of Completion of Works
9.07	Definition of Period of Maintenance
9.08	Execution of Works of repair etc.
9.09	Cost of Execution of Works of Repair, etc
10.0	Alteration, Additions & Omissions
10.01	Variations
10.02	Valuation of Variation
10.03	Claims
10.04	Materials Obtained from Dismantling/Excavation
11.0	Measurement
11.01	Quantities
11.02	Works to be measured
12.0	Provisional Payment
13.0	Remedies and Powers
13.01	Forfeiture
13.02	Valuation at Date of Forfeiture
13.03	Payment after Forfeiture
13.04	Illegal Gratification
13.05	Urgent Repairs
13.06	Employer's Role
14.0	Notice
14.01	Service of Notice on Contractor
14.02	Service of Notice on Employer
14.03	Importance of Special Conditions
15.0	Miscellaneous
15.01	Provision of Adequate shoring
15.02	Provision of Shed, Store, House etc.
15.03	Payment of Wages Act.
15.04	Safety
15.05	Laws, by laws etc. Relating to Work
15.06	Change in Partnership Firm
15.07	Provision for Settlement of Disputes
15.08	Wages to be paid in Time
15.09	Malpractice
15.10	Black Listing

CONDITIONS OF CONTRACT

Part-1, General Conditions

DEFINITIONS & INTERPRETATION

1.1 Definitions

In the contract (as hereinafter defined) the following words and expression shall have the meanings hereby assigned to them except where the context otherwise requires:-

- a] "Employer" means the NIT, Rourkela.
- b] "Contractor" means the person or persons, firm or company, whose tender has been accepted by the Employer and includes the Contractors personal representatives, successors and permitted assignees.
- c] "Engineer-in-charge" means representative of NIT, Rourkela and notified in writing to the contractor to act as Engineer for the purpose of the contract.
- d] "Engineers representative" means any resident engineer or assistant of the Engineer or any clerk of works or any other employee or agent appointed from time to time by the Employer.
- e] "Work" shall mean and include all work specified or set forth and required in and by the specifications drawing and schedule here to be annexed or to be implied there from or incidental thereto or to be hereafter specified or required in such explanatory instructions and drawings.
- f] "Contract" means the Invitation to Tender, Instructions to Tenders, General Conditions of Contract, Special conditions of Contract, Specifications, Drawings, Tender Schedule showing approximate quantities, quoted rates and amount against each item, Time Schedule, Letter of intent, Tender and the Contract agreement.
- g] "Contract" Price" means the sum named in the tender subject to such additions thereto or deductions there from as may be made under the provisions of the Contract.
- h] "Constructional Plant" means all appliances or things of whatsoever, nature required in or about the execution, completion or maintenance of the Works or Temporary Works.
- i] "Temporary Works" means all temporary works of every kind required in or about the execution, completion or maintenance of the work.
- j] "Drawing" means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.
- k] "Site" means the lands and other places envisaged by the Employer where the work are to be executed or carried out.
- l] "Letter of Intent" is an intimation by a letter to tenderer that tender has been accepted in accordance with the provision contained in that letter.
- m] "Approved" means approved in writing including subsequent written confirmation of previous verbal approval.

1.2 Terms "Specifications"

The term 'Specification' shall mean schedules, detailed designs, statements of technical data, performance characteristics and all such particulars mentioned as such in the contract. In the absence of any specific specifications issued by the Employer, the specifications issued by the B.I.S will apply.

2.0 Engineer's Representative

The duties of the Engineer's representative are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with the works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor except as expressly provided hereunder or elsewhere in the Contract to order any work involving delay or any extra payment by the Employer nor to make any variation of or in the Works. The

Engineer may from time to time in writing delegate to the Engineer's representatives any of the powers and authorities vested in the Engineer.

3.0 Assignment and Sub-Letting

The Contractor shall not assign the Contract or any part thereof or any benefit or interest therein or there under without the prior written consent of the Employer.

The Contractor shall not sublet the whole or a part of the work without prior written consent of the Employer and Sub-Contractor or Sub-Contractors are approved in writing by the Employer. Subletting shall not relieve the Contractor from any liability or obligation under the contract, and he shall be responsible for the acts, defaults and neglects of any Sub-Contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Subletting beyond the first stage shall not be permitted.

4.0 Extent of Contract

The Contract comprises of the construction, completion and maintenance of the works & except in so far as the contract otherwise provides the provision of all labour, materials, Constructional Plant, temporary works and everything whether of a temporary or permanent nature, required for such construction, completion and maintenance.

5.0 Contract Documents

The drawings shall remain in the sole custody of the Engineer but two copies thereof shall be furnished to the Contractor free of cost.

One copy of the drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the site and the same shall at the reasonable times be available for inspection and use by the Engineer and Engineers representative and by any other person authorized by the Engineer.

6.0 General Obligations

6.01 Contract Agreement : The Contractor shall enter into and execute a contract agreement in the form annexed hereto within the time specified in letter of intent and in default thereof the earnest money paid by the Contractor shall be forfeited and acceptance of his tender shall be considered as withdrawn. The cost of the stamp fee of the agreement is to be borne and paid by the contractor.

6.02 Security Deposit : The Contractor shall within the time specified in the letter of intent/work order deposit with the NIT Rourkela, further sum in addition to the earnest money paid with the tender to work upto a rate 2.5% of the value of the contract at the accepted rates as security deposit in cash or in the form of demand draft from a Recognised Bank in favour of NIT, Rourkela.

In the event of this not being furnished within the period specified in the letter of intent/work order the earnest money shall stand forfeited and acceptance of the Contractor's tender shall stand withdrawn.

To this sum shall be added the deduction from the contractor's interim bills for work done, so as to make a total security of 10% of the value of the contract as aforesaid.

The security deposit shall remain at the entire disposal of the Employer as a security for the satisfactory execution and completion of the works in accordance with the conditions of the contract.

"When the Security Deposit exceeds Rs.1.00 lakh (Rupees one lakh only), the Contractor, if he so desires, may convert the amount in excess of Rs.1.00 lakh into a Bank Guarantee Bond of one of the Scheduled or Nationalized Banks.

On due satisfactory performance and completion of the contract in all respects, the security deposit will be returned to the Contractor without any interest on presentation of an absolute no demand certificate from the Engineer in the prescribed form after completion of maintenance period.

6.03 Work to the satisfaction of Engineer : The Contractor shall execute, complete and maintain the works in strict accordance with the Contract to the satisfaction of the Engineer and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter. The Contractor shall take instruction and directions only from the Engineer/Engineer's representative.

- 6.04 Programme to be furnished : As soon as practicable after the acceptance of his tender, the Contractor shall, if required submit the Engineer for his approval a programme showing the order of procedure and method in which he proposes to carry out the works.
- 6.05 Contractors Superintendence : The Contractor shall give or provide all necessary superintendence during execution of the works. The Contractor or his competent and authorized agent is to be constantly on the works and shall give his whole time to the superintendence of the same.
- 6.06 Contractors Employees : The Contractor shall provide and employ on the site in connection with the execution and maintenance of the Works:
- a) Technical assistants and other staff, skilled and experienced in their respective area who are competent to give proper supervision to the work.
 - b) Skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the works.
- 6.07 Setting-out of the Works : The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the positions, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliance and labour in connection therewith. The checking of any setting out or of any line or level by the Engineer or the Engineer's representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof.
- 6.08 Use of the Explosives : Explosive shall not be used on the works by the contractor without the permission in writing of the Engineer.
- 6.09 Watching & Lighting : The Contractor shall in connection with the works provide and maintain at his own cost all light, guards, fencing and watching when and where necessary or required by the engineer/engineer's representative.
- 6.10 Care of Works : From the commencement to the completion of the works, the Contractor shall take full responsibility or the care thereof & of all the temporary works and in case any damage, loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever.
- 6.11 Accident or injury to Workman : The Employer shall not be liable for or in respect of any damages or compensation payable by Law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer.
- 6.12 Workman's Compensation : The Contractor shall at all times indemnify the Employer against all claims for compensation under the provision of the Workman's Compensation Act. or any other Law for the time being in force by or in respect of any workman employed by the Contractor in carrying out the contract.
- 6.13 Giving of Notice and Payment of fees : The Contractor shall give all notices and pay all fees required to be given or paid under any Central or State Statute, Ordinance or other Law.
- 6.14 Compliance With Statutes, Regulation etc : The Contractor shall conform in all respects with the provision of any such Statute, Ordinance or Law as aforesaid and the rules, Regulations or Bye-Laws of any local or other duly constituted authority which may be applicable to the Works.
- 6.15 Opportunities for other Contractors : The Contractor shall in accordance with the requirement of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer & of any other duly constituted authorities who may be employed in the execution on or near the site of any work not included in the Contract.
- 6.16 Supply of Plant, Materials and Labour : Except where otherwise specified the Contractor shall at his own expense supply and provide all the Constructional Plant, materials both for temporary and for permanent works, and labour required for the constructions completion and maintenance of the works.

6.17 Site Clearance on Completion of Work : On the completion of the work all rubbish, debris, kilns, vats tanks, materials and temporary structures of any sort or kind used for the purpose or connected with its construction are to be removed by the contractor and all pits and excavations filled up and the site handed over in a tidy and workmanlike condition.

7.0 Labour

In respect of all labour directly or indirectly employed on the works, the Contractor shall comply with all rules framed from time to time by Government (Central or State) or other local authority and legislations governing labour for the protection or health, sanitary arrangements, wages, welfare and safety of workers.

8.0 Work Materials and Plant

- 8.01 (a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication or on the site. The Contractor shall provide such assistance, instruments, machines, (labour and materials as are normally required for examining, measuring and testing any work and the quality).
- (b) All sample shall be supplied by the Contractor at his own cost.
- (c) The cost of making any test in performance of his works, shall be borne by the Contractor.
- 8.02 Access to Site : The Employer and / or the Engineer and any person authorized by him shall at all times have access to the works and to the site.
- 8.03 Removal of improper Work and Materials : The Engineer shall during the progress of the works have power to order in writing from time to time.
- (a) The removal from the site of any materials which in the opinion of the Engineer are not in accordance with the Contract.
- (b) The substitution of proper and suitable materials.
- (c) The removal and proper re-execution of any work which in respect of materials or workmanship, is not in the opinion of the Engineer in accordance with the contract.

9.0 Commencement Time & Delays

- 9.01 Commencement of Works : The Contractor shall commence the works on site within the period indicated in the Contract and shall proceed with the same with due expedition and without delay except as may be ordered by the Engineer.
- 9.02 Time for Completion : The whole of the works shall be completed within the time stated in the contract.
- 9.03 Extension of time for Completion : Should the amount of extra or additional work of any kind or other special circumstances of any kind whatsoever which may occur be such as fairly to entitle the Contractor to extension of time for the completion of the work the Engineer shall determine the amount of such extension.
- 9.04 Rate of Progress: The whole of the materials, plant and labour to be provided by the Contractor & the mode, manner and speed of execution and maintenance of the works are to be a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the work or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the works by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the works by the prescribed time of extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day.

- 9.05 Liquidated Damages to Delay : In case the Contractor fails to complete the work within the stipulated time period indicated in the contract, unless such failure is due to force majeure or due to the Employer's default, the contractor shall pay to the Employer by way of compensation for delay and not as penalty, a sum up to maximum 10% of the contract value. This is agreed that this is a pre-estimate of the loss/damage which will be suffered on account of delay/breach on the part of the contractor and the said amount will be payable on demand without there being any proof of the actual loss or damages caused by such delay/breach. The decisions of the Engineer/Site-in-charge in regard to the actual delay will be final and binding on the contractor.
- 9.06 Certificate of Completion of Works : As soon as, in the opinion of the engineer, the works shall have been substantially completed & shall have satisfactorily passed any final test that may be prescribed by the contract, Maintenance of the works shall commence from a mutually agreed date. The "Certificate of Completion" will be issued only after the work is completed in all respects.
- Final payment for work shall be made only on the personal certificate of the officer-in-charge of execution of the work in the format given below :
- " I, Executing Officer of (Name of the Work), am personally satisfied that the work has been executed as per the specifications laid down in the Contract Agreement and the workmanship is upto the standards followed in the Industry".
- 9.07 Definition of Period of Maintenance : In these conditions the expression "Period of Maintenance" shall be either twelve months or any other period if specifically specified in the special conditions of this contract, and calculated from the date of initiation of maintenance as per clause 9.06 above.
- 9.08 Execution of Works of repair etc. : To the intent that the works shall at or as soon as practicable after the expiration of the period of maintenance be delivered up to the NIT in as good & perfect a condition to the satisfaction of the Engineer as that in which they were at the commencement of the period of maintenance the Contractor shall execute all such work of repair, amendment, reconstruction, rectification and making good of defects imperfection, or other faults as may be required of the contractor in writing by the Engineer during the period of maintenance.
- 9.09 Cost of Execution of Works of Repair etc. : All such work shall be carried out by the contractor at his own expense if the necessity thereof shall in the opinion of the Engineer be due to the use of materials or workmanship not in accordance with the contract or to neglect or failure on the part of the contractor to comply with any obligation expressed or implied on contractor's part under the contract.

10.0 Alternations, Additions & Omissions

- 10.01 Variations : The Engineer shall make any variation of the form of quantity of the works or any part thereof that may in his opinion be necessary and for that purpose or if for any other reason it shall in his opinion be desirable shall have power to order the contractor to do and the contractor shall do any of the following :
- a) Increase or decrease the quantity of any work included in the contract.
 - b) Omit any such work.
 - c) Change the character or kind of any such work.
 - d) Execute additional work of any kind necessary for the completion of the work.
- 10.02 Valuation of Variation : The Engineer shall determine the amount (if any) to be added or to be deducted from the sum named in the tender in respect of any extra or additional work done or work omitted by his order. All such work shall be valued at the rates set out in the Contract if in the opinion of the Engineer the same shall be applicable.
- 10.03 Claims : The Contractor shall send to the Engineer's representative once in every month an account giving particulars as full and detailed as possible of all claims for any additional expense to which the Contractor may consider himself entitled and of all extra or additional work order by the Engineer which he has executed during the preceding month and no claim for payment for any such work will be considered which has not been included in such particulars.

10.04 Materials Obtained from Dismantlement and Excavation etc :

- (1) The Contractors in the course of their works, should understand that all material obtained in the work of dismantling, excavation etc. will be considered Employer's property.
- (2) All gold, silver, oil and other minerals of any description and precious stones, coins, treasures, etc. which shall be found in or upon the site shall be the property of the employer, and the Contractor shall duly preserve the same to the satisfaction of Employer and shall from time to time, deliver the same to such person or persons as the Employer may appoint to receive the same.

11.0 Measurement

11.01 Quantities : The quantities set out in the tender Schedule are the estimated quantities of the work but they are not to be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillment of his obligations under the Contract.

11.02 Works to be Measured : The Engineer shall except as otherwise stated ascertain and determine by taking measurement of the work done in accordance with the Contract. He shall when he requires any part or part of the works to be measured give notice to the Contractor's authorized representative should forthwith attend or send a qualified agent to assist the Engineer or his representative in making such measurement and shall furnish all particulars required by them. The Contractor shall be paid for the quantities resulting from measurement of the executed work.

12.0 Provisional Payment

- (a) No payment shall ordinarily be made for works estimated to cost less than rupees ten thousand till after the whole of the works shall have been completed but if any payment during the course of the execution of works is considered desirable in the interest of works, the Contractor may be paid at the direction of Engineer. But in the case of works estimated to cost more than rupees ten thousand, mostly payments for the portion of work already done, may be made either on the basis, of measurements to be recorded by the Engineer or the Contractor shall on submitting the bill therefore be entitled to receive a monthly payment proportionate to the part thereof then approved and passed by the Engineer, whose passing of the sum to be payable shall be final and conclusive against the Contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final payment only.
- (b) A bill shall be submitted by the Contractor each month on or before the date fixed by the Engineer for all work, executed in the previous month and the Engineer shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible, before the expiry of ten days from the presentation of the bill. If the Contractor does not submit the bill within the time fixed as aforesaid the engineer may depute his representative to measure up the said work in the presence of the Contractor, whose countersignature to the measurement list will be sufficient warrant and the Engineer may prepare a bill from such list which shall be binding on the Contractor in all respects.
- (c) As and by way of additional security from every progressive on account bill of the Contractor, 7.5 percent of the value of the work executed, shall be deducted and kept as security deposit until the total of the amount so deducted plus the security (including the earnest money) already deposited will equal the prescribed security, which is 10 % of the value of the works.
- (d) The Employer shall not be liable for any loss of securities of any description, nor for any depreciation in the value of securities while in its charge nor for any loss of interest thereon.

The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the contract or the execution of the works unless the contractor shall have made a claim in writing in respect thereof before the giving of the Maintenance Certificate under this clause.

13.0 Remedies and Powers

13.01 Forfeiture : If the Contractor shall become bankrupt or have an order for appointment of any receiver made against him or shall present any petition in bankruptcy or shall make an arrangement with or assignment in favour of his creditors or shall agree to carry out the Contract under a committee of inspection of his creditors or if the Contractor shall assign the Contract within the

consent in writing of the Employer first obtained or shall have an execution levied on his goods or if the Engineer shall certify in writing to the Employer that in his option the Contractor :-

- (a) has abandoned the Contract, or
- (b) without reasonable excuse has failed to commence the works or has suspended the progress of the works for 28 days after receiving from the Engineer written notice to proceed, or
- (c) has failed to remove materials from the Site or to pull down and replace work for 28 days after receiving from the Engineer written notice that the said materials or work had been condemned and rejected by the Engineer under these conditions, or
- (d) is not executing the works in accordance with Contract or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or
- (e) has to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary sub-let any part of the contract, or
- (f) otherwise failed to perform his part of the contract according to the true intent & meaning thereof then the Employer may after giving 14 day's notice in writing to the Contractor, enter upon the site and the works and expel the Contractor there from without thereby avoiding the contract or releasing the Contractor from any of his obligations or liberties under the Contract or effecting the rights & powers conferred on the Employer or the Engineer by the Contract or otherwise available under the law and may himself complete the works or may employ any other Contractor to complete the works.

13.02 Valuation at Date of Forfeiture : The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute and shall certify what amount (if any) had at the time of such entry and expulsion been reasonable earned by or would reasonable accrue to the Contractor in respect of work then actually done by him under the Contract.

13.03 Payment after Forfeiture : If the Employer shall enter and expel the Contractor under this clause he shall not be liable to pay to the Contractor any money on account of the Contract until the expiration of the Period of Maintenance and there after until the costs of completion and maintenance damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any), as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount.

13.04 Illegal Gratification and breach the terms of Contract : The Contract may also be rescinded and the Contractor shall be liable to make good any loss or damage resulting from such cancellation.

(a) If any bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor, any of his servants or agents to any public office or person in the employment of the Employer in any way relating to his office or employment or if any such officer or person shall become in any way directly or indirectly interested in the contract, or

(b) If the Contractor has committed a breach of any of the terms of the contract and in particular fair wages clause and labour regulations.

13.05 Urgent Repairs : If by reason of any accident or failure or other event accruing to or in connection with the works or any part thereof either during the execution of the works or during the period of Maintenances, any remedial or other work or repair shall in the opinion of the Engineer or the Engineer's representative be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair the Employer may be his own or other workmen do such work or repair as the Engineer or the Engineer's representative may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract, all the cost and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any money due or which may become due to the Contractor

provided always that the Engineer or the Engineer's representative (as the case may be) shall as soon after the occurrence of any such emergency as may be reasonable practicable notify the Contractor thereof in writing.

13.06 Employer Will have full Liberty to retain and set off sums due or to Become due to Contractor : The Employer will have full liberty to retain and set off all sums due or to become due to the Contractor (including Security Deposits and Earnest money) whether under this contract or under any other transaction or claim whatsoever, against any sum due or to the Employer under this contract or under any other transaction or claim whatsoever.

14.0 Notice

14.01 Service of Notice on Contractor : Any notice to be give to the Contractor under the terms of the Contract shall be served by sending the same by post to or leaving the same at the Contractor's principal place of business.

14.02 Service of Notice on Employer : Any notice to be given to the Employer under the terms of the contract shall be served by sending the same by post to or leaving the same at the Employer's last known address.

14.03 Importance of Special Conditions : The Special Conditions attached hereto where they differ from the General Condition and Specifications shall over- ride them similarly the description of work in the tender schedule where it differs from the specifications or drawings shall over-ride them.

15.0 Miscellaneous

15.01 Provision of Adequate Shoring : The Contractor shall at his own cost, provide the material for and execute all such shoring, timbering and strutting as is necessary during the execution of work for the stability and safety of all structures, excavations and works such that no damage, injury or loss is caused or likely to be caused to any person or property.

15.02 Provision of Shed, Store, Houses etc. : The Contractor shall, at his own cost, provide such sheds or damp proof store houses as the Employer may consider necessary for storage of materials and shall also at his own cost provide Concrete Mixer, Soaking vats etc.

15.03 Payment of Wages act : The Contractor shall comply with the provisions of the Payment of Wages Act, and the Rules made there under in respect of all employees employed by him in carrying out this contract as he himself and not the Employer, is responsible under the said act for the compliance thereof.

15.04 Safety : The Contractor shall be responsible for the safety of his workmen and employees. All serious accidents to them on construction site are to be immediately reported. The Contractor shall be responsible that all such accidents, however and wherever occurring on his works, are reported with out delay to the Engineer and he should make every arrangement to give all possible assistance.

15.05 Laws, Bye Laws etc. relating Works : The Contractor shall strictly conform to the provisions, for the time being in force of any law relating to works of any regulations and byelaws made by any local authority or any water and lighting companies or any undertakings, within the limits of the jurisdiction of which it is proposed to execute the work.

15.06 Change in Partnership Firm : In the case of contract by partnership firm, any change in the constitution of the firm shall forthwith be notified by the Contractor to the Engineer.

15.07 Provision for settlement of disputes : All questions, disputes or difference of any kind whatsoever, arising out of or in connection with the contract at any time, whether during the progress of the work or after its completion or whether before or after the determination of the contract, other than questions, disputes or differences for the decision of which specific provision have been made in the foregoing clause of these conditions (hereinafter referred to as "excepted matters" and decisions on such "except matters" according to the said specific provisions shall be final and binding on the Contractor and shall not be re-opened or attempted to be re-opened on the ground of any informality; omission, delay or error in the proceeding in or about the same or on any other ground whatsoever) shall be submitted in writing by the Contractor to the Employer and the Employer shall within a reasonable time, after the submission of the same, make and notify its decision thereon in writing.

If the Contractor be dissatisfied with the decision of the Employer on any matter in question, dispute or difference on any ground in connection with this contract or as to the withholding by the Employer of any certificate to which the contractor may claim to be entitled to, or if the Employer fails to make a decision within a reasonable time, then and in any such case but not including any of the excepted matters, or matters for which the Contractor has given no claim certificates, the Contractor may within ten days of the receipt of such decision or after the expiry of the reasonable period of time, as the case may be, demand in writing that such matter in question, dispute or difference in connection with this contract be referred to arbitration. Such demand for arbitration shall be delivered to the Employer by the Contractor shall specify the matters which are in question, dispute or difference and only such question, dispute or difference, other than any of the excepted matters, in respect of the contract of which the demand has been made and no other shall be referred to arbitration.

The further progress of any work under the contract shall, unless otherwise directed by the Engineer, continue during the arbitration proceeding, and no payment due or payable by the Employer shall be withheld on account of such proceeding, provided, however, that it shall also be opened to the arbitrator to consider and decide whether or not such work shall continue during the arbitration proceeding.

Matters in question, dispute or difference other than the excepted matters, in respect of this contract to be submitted to arbitration as foresaid shall be referred for decision to a Sole Arbitrator, who shall be the Director, NIT, Rourkela, or any person nominated by him in his behalf.

In case an arbitrator nominated by Director, NIT, Rourkela fails or neglects to arbitrate or is removed, dies or become incapable or withdraw from arbitration for any reason whatsoever, the Director, NIT, Rourkela, as the case may be, shall have the authority to nominate any other person afresh and / or supply the vacancy for the arbitration.

Such submission shall deemed to be submission to arbitration and the decision of such arbitration shall be final and conclusive and the provision of the Indian Arbitration Act of the rules there under and all statutory modifications thereof shall govern all such arbitration proceeding and shall be deemed to apply to and be incorporated in this contract.

- 15.08 Wages to be Paid in time : The contractor shall ensure that their employees are paid the wage in time and can only make such deductions which are authorized under the payment of wages act and rules framed there under, that relevant records and registers required to be maintained under the said Act & Rules to be maintained by the Contractors and produced before the officers of the Institute and such other authorities under the Act for scrutiny as & when required. In case the Contractors default in making statutory payments under payment of wages Act or any other labour Act, which the Contractor is obliged to make to their employees, the Employer reserves the right to deduct any amount from the bills of the Contractors towards payment to their employees on demand from the Govt. Labour Directorate. This amount shall be made available to such authorities of the Govt. for disbursement to the employees of the contractor. They, however, will be kept informed about the same.
- 15.09 Malpractice : Any unauthorized removal or possession of any of the Employer's properties by the Contractor, its agents, servants and / or employees shall be deemed to be a malpractice. If the Contractor is found guilty of Malpractice in the course of carrying out the contract resulting from the acceptance of his tender, the contract will be liable to be cancelled and the security deposit forfeited without prejudice to and other action which the employer may take under law.
- 15.10 Black Listing : Any Contractor found guilty of theft or in unauthorized possession of Institute's properties, of deliberate negligence of safety in work place, consciously littering or damaging institute premises or consciously delivering a poor quality product is liable to be debarred from allotment of further work and the work in hand is also liable to be terminated without any notice. Further such contractors are liable to be blacklisted form allotment of work in NIT. The above action will be taken in addition to the other penal action under the relevant provisions of law which the employer may take.

FORM OF AGREEMENT

This agreement made the day of 2020

BETWEEN THE NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA in the State of Orissa, India
(hereinafter called the Employer) of the one part and

of in the state of

(hereinafter called “the Contractor”) of the other part. WHEREAS the employer is desirous that certain
works should be constructed, viz

and has accepted a tender by the contractor for the construction, completion and maintenance of such works

NOW THIS AGREEMENT WITNESSETH as follows :

1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the condition of contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this agreement viz. :
 - a) The said Tender.
 - b) Invitation to Tender.
 - c) Instructions to Tenderers.
 - d) General Conditions of Contract.
 - e) Special Conditions of Contract.
 - f) Specifications.
 - g) Tender Schedule showing the approximate quantities quoted rate and amount against each item.
 - h) Time Schedule.
 - i) Drawings.
 - j) Letter of Intent.
3. In consideration of the payments to be made by the Employer to the contractor as hereinafter mentioned the contractor hereby convenants with the employer to construct, complete and maintain the works in conformity in all respects with the provisions of the contract.
4. The Employer hereby convenants to pay the contractor in consideration of the construction, completion and maintenance of the works the contract price at the times and in the manner prescribed by the contract.

Signed, sealed and delivered by the said

In the presence of :

Dated Signature of Contractor
in the capacity
on behalf of

Dated Signature of the
Employer
Designation

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

**SPECIAL CONDITIONS
OF
CONTRACT**

(FOR CIVIL ENGINEERING WORKS)

SPECIAL CONDITIONS OF CONTRACT FOR CIVIL ENGINEERING WORKS

1. The scope of contract generally covers complete civil engineering works required in connection with (i) including all ancillary works such as drains, diversions, alterations and additions to existing Civil Engineering Works and cleaning the site etc. complete as per the approved working drawings and instructions used to contractor from time to time. The contractor shall have to take the necessary precaution to safeguard against any damage to the neighboring existing structure and underground services etc.
2. The tenderer shall visit and is deemed to have visited the site and make himself thoroughly acquainted with the nature and requirement of the job, facilities of access for materials and removal of rubbish cost, of carriage, freights and other charges and shall allow in his tender for special difficulties if any in carrying out the work. He shall also include in his tender, charges for doing final surfacing to all repairs required to be done for any type of fixture, installation, etc. and for the removal of spoil arising of his contract.
3. The contract for the work is a complete one for labour, materials and workmanship including the use of construction equipments, tools and tackles. The contractor shall have to make his own arrangement for all materials required for the due performance of the contract.
All lap lengths in reinforcement rods have to be approved by the Engineer. Measurements of reinforcement will be inclusive of approved chairs, spacers, stays and overlaps.
4. The specifications and drawings given for execution, acceptance of construction and erection works are obligatory on the contractor for the construction works of NIT, Rourkela. If in the course of construction work, some additional problems arise, which are not covered by the given specifications, the contractor will be given proper instruction by the Engineer. Such instructions shall be observed in full by the contractor regarding specifications, drawings, method of conducting work, any other measures necessary for the fulfillment of construction. Verbal instructions be always got confirmed from the Engineers concerned, before execution by the contractor.
5. Specifications for the quality of building materials as also for the quality of construction work are given in corresponding sections of these specifications and / or the working drawings. Unless otherwise specified all materials and workmanship shall conform to the specifications attached and drawings supplied. Any item not covered by these, shall conform of the latest Indian Standard specifications.
6. Work shall be carried out in such a manner as not to interfere with or affect, retard or disturb the progress of other works being executed by other agencies. The contractor's rate shall include for any losses due to likely delay in coordinating with other works and interruption on account of inherent nature of the job, and as such, no extra claim will be admissible on such account.
7. If due to the design and other stipulations in the tender, or requirements at site, a particular sequence of overall constructional operations has to be followed due to which certain interruptions to any one or more types of work or items of execution are inherent, no claims for such interruption are admissible.
8. For carrying out the work, the contractor will be provided with two sets of working drawings.
9. All technical documents regarding the construction of works are generally given in the metric system and all works should be carried out according to the metric system. All documents concerning the work shall also be carried out in the metric system.
10. While carrying out the works the contractors should be provided for:-
 - a) Safety of personnel engaged on the construction.
 - b) Protection and safety of works during their progress.
 - c) Sanitary and hygienic condition of working and living for his workers, as per labour regulations.
11. In respect of portions of works which are likely to be embedded or covered up by the other works, the contractors shall submit them for technical inspection and have the necessary measurement and completion certificates duly signed by the engineer and contractor before letting such portions to be embedded or covered.

12. On completion of work, the contractor must submit to the engineer the following documents for the passing of the works:-
 - I. The technical documents according to which the work was carried out.
 - II. A copy of the working drawing showing thereon all additions and alterations in the process of execution.
 - III. Completion certificates for 'embedded' and 'covered up' works.
 - IV. Manufacture's certificates, guarantees and test certificates.
 - V. Certificates or control checking and test of materials.
13. The contractor shall submit to the engineer, in the form required by him and in the appointed time, the information regarding the progress of the work being carried out by them.
14. The power given to the representative of the contractor for signing technical certificates shall be indicated in a special letter addressed to the engineer.
15. The technical commission for the acceptance of covered work and unfinished work should consist of a representative each of :
 1. Employer
 2. Consultants.
 3. Contractor who has done the work, and
 4. Agency who accepts the work for continuation of the construction of the building or/ erection of equipment.
16. Contractor shall properly store all materials brought by him to the work site to prevent damage due to rain, wind direct exposure to sun etc. and also from theft, pilferage etc. The contractor shall maintain stocks of all materials required by him for the proper and speedy execution of his work.
17. The contractor shall make his own arrangement to procure all construction plant and equipment, tool and tackles etc. for his works.
18. All materials, construction plants and equipments etc. once brought by the contractor within the NIT area are not to be moved from there without the written authority from the engineer. Similarly, all enabling works built by the contractor for the main construction undertaken by him, are not to be dismantled and removed without authority from the Engineer.
19. The contractor shall at all times provide sufficient fencing, notice boards, lights, watchmen to protect and guard the works and provide all facilities and observe all the rules mentioned in the General Conditions of the Contract enclosed with the tender.
20. a) Concrete and mortars are generally specified by the strength or the approximate proportions by volume respectively. The contractor may quote on the basis of their proportions. The concrete that will be used in the work shall be proved to be of requisite standard as laid down in the Indian standard specification and also by other intermediate test that may be prescribed for important construction. Batching by volume may be permitted at the discretion of the Engineer.
b) The quantities of all excavation, concrete, reinforcement steel work and shuttering as shown in the tender schedule are approximate. The rate quoted shall fully apply for any variations in the scope of work and the resulting quantities. The payment shall be made on actual quantities constructed and measured at site as per standard practice in conformity with I.S 1200.
21. The aggregate to be used in the work shall be hard, strong and durable and shall be clean and free from clay films and other adherent coating. These must be machine crushed, screened before mixing. Sand must be coarse and thoroughly screened before mixing. Mixing shall be done by an approved mechanical batch mixer or by portable concrete mixers.
22. In the areas of fill, filling shall not be done until foundations and underground work e.g. pipes cables, etc. are completed. Should the fill be done prior to such completion, the contractor shall do all excavation and protection work for doing the foundations, underground works etc. at his own cost.
23. a) The specifications prescribe various tests at specified intervals for ascertaining the quality of his work done. If the tests prove unsatisfactory, the Engineer shall have liberty to order the contractor to redo the work done, in that period, and do order such alterations and strengthening that may be necessary at the cost of the contractor. The contractor shall be bound to carry out such orders

failing which the rectification, will be done by the Engineer through other agencies and cost recovered from the contractor.

- b) Structure test: - The engineer shall instruct the contractor to make a loading test on the work or any part thereof at the contractors cost, if in his opinion such a test is necessary.
 - c) Charges for all tests shall be borne by the contractor.
24. The contractor shall not allow any visitors on the works except with the approval of the Engineer.
 25. The tenderers are required to quote rates against all the items of the attached Tender schedule, failing which their tender may not be considered.
 26. All guarantees such as for waterproofing materials for the entire work as obtained from the manufacture shall be transferred to the employer by the contractor after completion of the work.
 27. The contractor shall keep a competent and qualified engineer constantly, assisted by others, who will be responsible for carrying out of the work to the satisfaction of the engineer-in –charge. Any direction or instructions given to him in writing shall be held to have been given to the contractor.
 28. The following guidelines should be followed in respect of calculation of theoretical consumption of cement for civil engineering works:-
 - I. Theoretical consumption will be calculated on the basis of design-mix.
 - II. In case of concretes and mortar specified in the contract on volumetric proportion basis, the calculation of theoretical consumption will be governed by analysis.
 - III. The permissible wastage of cement over the theoretical consumption as indicated above will be upto 5%.
 29. a) Item of work not covered by the specification attached shall confirm of the latest version of Indian standard Specification.
 - b) The contractor shall employ such workers who possess good antecedent reports. The contractor shall be fully responsible for the conduct of his workman and shall ensure that his workers do not indulge in any criminal activities. In case of any loss suffered by the NIT due to theft, damage etc. caused by the contractor's workmen, the same will be made good by suitable recovery from the contractors running bills without prejudice to other rights of the company under the contract and under the law.
 30. The contractor should be conversant about the location & the condition of the surroundings before quoting the rates.

The provision for approach road for bringing the building materials at the works site will be the responsibilities of the contractor at his cost.
 31. The date of taking over of the building by the representative of NIT shall be taken as the date of completion of the building. The defects of construction which are within the scope of the contract shall be recovered and signed jointly by the contractor's representative. The recorded defects will have to be attended by the contractor and it shall be the sole responsibility of the contractor. Only after completion, finalization of accounts in respect of final bill will be taken up by the department. If the recorded defects are not attended to by the contractor within 15 days, the department will at its own discretion employ another agency at the risk and cost of the contractor to get those recorded defects attended without any further reference to the contractor.
 32. The contractor shall deal with all aspect of their as well as their sub- contractors labour including industrial relations.
 33. The contractor should ensure payment of all dues including retrenchment compensation, even if the labour is engaged by his sub-contractor.

SL.No.	ITEM	MAKE
1	GREY CEMENT(43 GRADE)	ULTRA TECH, OCL,(KONARK) ,
2	WHITE CEMENT	JK, BIRLA WHITE,SIKA
3	WALL PUTTY	BIRLA, J.K, SIKA,OCL
4	REINFORCEMENT/STRUCTURAL STEEL	SAIL, TATA STEEL.
5	CLAY BRICK FLYASH BRICK	REPUTED BRAND APPROVED BY PROJECT ENGINEER. APPROVED BY PROJECT ENGINEER.
6	ANTI-TERMITE TREATMENT	HILBAN,LETHAL
7	CONCRETE ADDITIVE	CICO, PIDILITE, SIKA, DR FIXIT,BASF,FOSROC
8	FLUSH DOOR/ SHUTTERS	GREEN PLY, CENTURY, KITPLY ARCHID,SYLVAN
9	PLYWOOD / BLOCK BOARD / SOFT BOARD	KITPLY, GREEN PLY, CENTURY, MAYUR.ARCHID,SYLVAN
10	PRELAMINATED PARTICLE BOARD	NOVAPAN, ANCHOR, GREEN LAM, MAYUR.
11	LAMINATES	CENTURY, GREEN LAM, DURO, MAYUR.
12	ADHESIVE FOR WOOD WORK	FEVICOL, VAMICOL, PIDILITE.ARALDITE
13	POLYURETHANE SEALANT	KRYTON, PIDLITE
14	POLYETHELENE BOARD/ BACK UP ROD	DUTRON SUPREME INDUSTRIES
15	ALUMINIUM SECTIONS	JINDAL, HINDALCO
16	STAINLESS STEEL	OZONE, DORMA.
17	EXPANSION/ FASTNERS	FISHER, HILTI, ANCHOR
18	FLOAT GLASS/ TOUGHENED GLASS	SAINT GOBAIN, AIS GLASS,GOLDEN FISH
19	CERAMIC TILES	KAZARIA, ASIAN,JOHNSON,NITCO,SOMANY
20	VITRIFIED PORCELAIN TILES	KAZARIA, JOHNSON, ASIAN, SOMANY,NITCO
21	INTERLOCK TILES/GRASS PAVER BLOCKS	DURASTONE, ULTRA, SPECTRA OR REPUTED BRAND APPROVED BY PROJECT ENGINEER.
22	TERRAZZO TILES	NITCO, MODERN, HINDUSTAN,DURACON
23	CEMENT CONCRETE TILES	ULTRA, NITCO, DURACRETE.
24	SYNTHETIC ENAMEL PAINTS	BERGER (LUXOL GOLD), ASIAN (APCOLITE), DULUX (GLOSS)

25	OIL BOUND DISTEMPER	ASIAN (TRACTOR), BERGER (BISON), NEROLAC.
26	CEMENT PAINT	SNOWCEM PLUS, BERGER (DUROCEM EXTRA), ULTRATECH, ASIAN
27	PLASTIC EMULSION PAINT	ASIAN, NEROLAC.
28	OTHER PAINTS/PRIMERS	DULUX, ASIAN, BERGER, NEROLAC,
29	PAINT	BERGER, ASIAN PAINTS, NEROLAC.DULUX
30	SURFACE TEXTURED PAINT (EXTERIOR)	ASIAN,BERGER,DULUX
30A	EXTERIOR PAINT	ASIAN,BERGER,DULUX
31	DOOR/ WINDOWS /PATCH FITTINGS	GODREJ, HETTICH, DORMA, OZONE,
32	ANTI BACTERIAL/ANTI FUNGAL PAINT	MAS PAINT (ULTRATECH) , REPUTED BRAND APPROVED BY PROJECT ENGINEER.
33	LOCKS	GODREJ, HARRISON.
34	WARDROBE/ CUBBOARDS	GODREJ, HECHETTE
35	NON METALLIC HARDENER COMPOUND	CICO, RECRON,SIKA
36	POLYSULPHIDE SEALANT	PIDLITE, FOSRROC.
37	PAVEMENT TILES	ASIAN,KAJARIA,JHONSON
38	VINYL FLOORING	TARQUET, ARMSTRONG.
39	MS PIPE	JINDAL,TATA,SAIL.
40	LAMINATION	GREENLAM/DURO/CENTURY, MAYUR
41	HINGES	SUZU/GARG/HETICH
42	DOOR CLOSER	GODREJ,HARDWIN, LINK
43	WALL PANELLING	ARMSTONG, APPROVED BY PROJECT ENGINEER
44	FALSE CEILING	ARMSTONG, INDIA GYPSUM
45	WOODEN FLOORING	ARMSTONG, CCIL
46	GLASS MOSAIC TILES	CORAL GLASS MOSAIC, APPROVED BY PROJECT ENGINEER
47	CARPET	INTER FACE FLOOR, ACE
48	ROOF SHEETING	BHUSAN,JINDAL,TATA

49	CHAIRS AUDITORIUM	GODREJ. APPROVED BY PROJECT ENGINEER
50	SCREENS	HEAVY QUALITY , APPROVED BY PROJECT ENGINEER
51	SYNTHETIC TRIANGULAR FIBRE	RECRON, RELIANCE
52	FRAMELESS TOUGHENED GLASS DOORS/WINDOWS/VENTILATORS	SAINT-GOBIN, MODI.
PLUMBING		
1.	VITREOUS CHINA WARE	PARRYWARE, HINDWARE, CERA
2.	PVC CONNECTORS	SUPRIME,ASTRAL
3.	SEAT COVER (HEAVY DUTY)	HINDWARE, PARRYWARE ,CERA
4.	STAINLESS STEEL SINK	NIRALI,HINDUSTAN
5.	AUTO URINAL FLUSH SYSTEM	TOSHI,PARRYWARE, HINDWARE, CERA
5A.	URINAL/WC FLUSHING SYSTEM	JAGUAR/MARC.
6.	CP BRASS SANITARY FITTINGS AND TOILET ACCESSORIES	JAQUAR, ESS-ESS,MARC,LEADER,ZALOTO ,KINGSTON
7	FLOOR DRAIN FIXTURE, RAIN WATER OUTLETS & CHANNEL GRATINGS	NEER, APPROVED BY PROJECT ENGINEER
8	C.P. GRATING FOR FLOOR TRAP	SEIKO,COBRA,
9	CAST IRON PIPES & FITTINGS MANHOLE COVERS AND FRAMES	
10	AS PER IS:3989 (PIPES & FITTINGS)	NECO, HEPCO
11	AS PER IS:1726 (MANHOLE COVERS AND FRAMES)	NECO , SKF
12	AS PER IS:1536- C.I. (LA)PIPES	IISCO, SUPRA
13	C.I. L.A FITTINGS	NECO
14	PIPE CLAMPS	NECO,SKF

15	GI PIPES (IS : 1239 AND IS : 3589)	TATA STEEL, JINDAL
16	GI PIPES FITTINGS(IS:1239)	TATA,JINDAL
17	PVC PIPE	SUPREME, FINOLEX,ASTRAL,PRINCE
18	CPVC PIPES & FITTINGS	FINOLEX,ASTRAL,SUPREME,PRINCE
19	RCC PIPE(IS:458)	PRAGATI CONCRETE,
20	STONEWARE PIPES, GULLY TRAPS(IS:651)	PERFECT,RK, MARKED
21	DI PIPES(IS:8329)	ELECTRO STEEL,TATA,JINDAL
22	GM / FORGED BRASS VALVES	LEADER, ZOLOTO
23	SLUICE VALVES / NON RETURN VALVES	KIRLOSKAR, ,LEADER,VENUS
24	BUTTERFLY VALVE	CASTLE, KSB,KEYSTONE/KIRLOSKAR
25	WAFER TYPE CHECK VALVE	CASTLE, KIRLOSKAR
26	PRESSURE REDUCING VALVE	LEADER, ZOLOTO,
27	AIR RELEASE VALVE	ZOLOTO, APPROVED BY PROJECT ENGINEER
28	Y STRAINER / POT STRAINER	EMERALD. PPROVED BY PROJECT ENGINEER
29	STORM WATER DRAINAGE SUMP PUMPS	KSB, APPROVED BY PROJECT ENGINEER
30	SEWAGE HANDLING PUMPS	DP, GRUNDFOS, KSB, CALPEDA
31	COUPLINGS	APPROVED BY PROJECT ENGINEER,LOVEJOY
32	ANTI VIBRATION MOUNTING AND FLEXIBLE CONNECTIONS	DUNLOP, RESISTOFLEX
33	PRESSURE SWITCH	DANFOSS / SYSTEM SENSOR / INDFOSS
34	PRESSURE GAUGE	H GURU, FIEBIG
35	LEVEL CONTROLLER (WATER)	TECHNIKA, MINILEC, PUMPTROL
36	LEVEL INDICATOR (WATER)	TECHNIKA, MINILEC
37	LEVEL INDICATOR (OIL)	FORBES ,MARSHALL
38	MH/WATER TANK STEPS	KGM , APPROVED BY PROJECT ENGINEER
39	WATER TREATMENT PLANT	THERMAX, ION EXCHANGE
40	FILTER FOR WTP	AVENTURA/ PENTAIR/MMP
41	WATER TREATMENT PURIFIER	THERMAX, ION EXCHANGE, FONTUS
42	ULTRA VIOLET WATER PURIFIER	ALFA/CREATIVE/HI-TECH

43	DOSING PUMPS	LMI, TOSCHON PULSER FEEDER, SEKO
44	INSULATION FOR HOT WATER PIPES	
45	CLOSED CELL NITRILE INSULATION	ARKC, A-FLEX, OWEN'S CORNING
46	WATER HEATER (GEYSER)	VENUS, BAJAJ, RACOLD, KHAITAN OR USHA
47	FLANGES MS	CLASS 150 TABLE H
48	AIR BLOWER	KAY, EVEREST
49	SEWAGE TREATMENT PLANT	ION-EXCHANGE, THERMAX,
50	SCREW PUMP	ROTOPUMP, WATER SUPPLY SPECIALISTS
51	WELDING RODS	ADVANI, VICTOR
52	FASTENER	HILTI, FISHER
53	OVERHEAD TANK	SINTEX, APPROVED BY PROJECT ENGINEER
54	MIRROR	FLOAT GLASS(MODIGUARD/SAINT GOBION)
12.	M.S. PIPES:	
S. NO.	DETAILS OF EQUIPMENT/ MATERIAL	MANUFACTURERS
13.	I) UPTO 150MM DIA	TATA / JINDAL /SAIL
14.	II) ABOVE 150MM DIA	TATA / JINDAL /SAIL
15.	BUTTERFLY VALVES	KEYSTONE /CASTLE
16.	NON RETURN VALVE	KEYSTONE /CASTLE
17.	BALANCING VALVES (MANUAL)	KEYSTONE /CASTLE
18.	BALANCING VALVES (AUTOMATIC)	FLOWCON,DENMARK
19.	2-WAY PRESSURE INDEPENDENT DYNAMIC BALANCING CUM CONTROL VALVE FOR AHU & FCU	FLOWCON,DENMARK
24.	G.I. SHEETS	SAIL / TATA /JINDAL
25.	GLASS WOOL	OWENS CORNING / KIMCO /ARKC

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Tender for: - "External painting of Academic and Hostel Buildings of NIT, Rourkela ".

BOQ (Bill of Quantity) /PRICE BID / QUOTED PRICE FORMAT [Should only be uploaded in the Price-Bid cover. Not to be enclosed with the Technical bid]

National Institute of Technology Rourkela- 769008, Odisha					
Tender Inviting Authority: REGISTRAR NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA-769008					
Tender Notice No.: NITR/PI/EMI/2020/52 DATED- 17/04/2020					
Name of Work: Tender for External painting of Academic and Hostel Building					
PRICE SCHEDULE (DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)					
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)					
Name of the Bidder/ Bidding Firm / Company :					
SL.No	Description	Qty	Unit	Estimated Rate in Rs. P	Total Amount without Taxes in Rs. P
1	Conveyance of Materials such as stone metal refuse,garbage, rubbish etc including labour for loading and unloading. Beyond initial lead. Complete as per direction of Engineer in charge				
1.01	Truck load Upto 1km	200.000	Cum	71.00	14200.00
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:2:4 (1 Cement : 2 sand:4 Coarse Aggregate 20mm Down)	45.000	Cum	5159.00	232155.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:4:8 (1 Cement : 4 sand:8 Coarse Aggregate 40mm Down)	15.000	Cum	3961.00	59415.00
4	Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means over areas (Exceeding 30Cm in depth 1.5m in width as well as 10 Sq.M on Plan) including disposal of excavated earth lead upto 50m and lift upto 1.5m disposed earth to be levelled and re-graded (All kinds of Soil)	90.000	Cum	120.00	10800.00
5	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20Cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50M and lift upto 1.5M	90.000	Cum	76.00	6840.00
6	Supplying and filling in plinth with river sand under floors including watering ramming consolidating and dressing complete.	25.000	Cum	619.00	15475.00
7	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3sand:6 Coarse aggregate) over 75mm thick bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	1200.000	Sqm	352.00	422400.00
8	Providing and laying in position Reinforced cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:2:4 (1 Cement : 2 sand:4 Coarse Aggregate 20mm Down) complete in all respect as per direction of Engineer in charge Upto plinth level	60.000	Cum	5333.00	319980.00
9	SHUTTERING & CENTERING				
9.01	Foundations footing bases of column etc for mass concrete	300.000	Sqm	164.00	49200.00
10	Providing and placing reinforcement for R.C.C. work including straightening cutting bending placing in position and binding allcomplete. Upto plinth level and above plinth level				
10	Providing and placing reinforcement for H.C.U. work including straightening cutting bending placing in position and binding allcomplete. Upto plinth level and above plinth level				
10.01	Thermo Mechanically Treated Bars	900.000	Kg	77.00	69300.00
11	Providing and fixing of sheet covering over expansion joints with iron screws as per design to match the colour /shade of wall treatment				
11.01	Aluminum fluted strips 3.15mm thick 150mm wide	200.000	Sqm	228.00	45600.00
12	Brick work with Fly ash cement bricks of class designation 75 in foundation and plinth in cement mortar 1:6 (1 cement: 6 Sand) complete in all respect as per direction of Engineer in charge	20.000	Cum	3664.00	73280.00
13	Brick work with Flyash cement bricks of class designation 75 in Super structure above plinth level upto V floor level in all shapes and size in Cement mortar 1:6 (1 cement: 6 sand) complete in all respect as per direction of Engineer in charge	35.000	Cum	4197.00	146895.00
14	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work including cutting hoisting fixing in position and applying a priming coat of approved steel primer all complete.	550.000	Kg	75.00	41250.00
15	cement concrete flooring 1:2:4 (1 cement : 2 sand: 4 coarse aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete				
15.01	40mm thick with 20mm nominal size stone aggregate	500.000	Sqm	313.00	156500.00
16	12mm cement plaster of mix 1:6 (1 cement: 6 Sand)	3700.000	Sqm	107.00	395900.00
17	Distempering with 1st quality acrylic distemper (readymade) of approved manufacture and of required shade and colour complete, as per manufacturer's specification.				
17.01	New Work (Two or more coats)	25000.000	Sqm	44.00	1100000.00
18	Applying one coat of cement primer of approved brand and manufacturer on wall surface				
18.01	Cement primer	13000.000	Sqm	35.00	455000.00
19	Finishing wall with acrylic smooth exterior paint of required shade:				
19.01	New work (two or more coat applied @ 1.67kg/10 Sq.M) over and including base coats of water proofing cement paint applied @ 2.2 Kg/10 Sq.M	52000.000	Sqm	90.00	4680000.00
20	Providing and finishing wall surface with acrylic wall care putty (water based) of approved make (Birla or Equivalent) and finished smooth and even surface to receive painting including cost of scaffolding staging charges with all cost of materials taxes labour T&P etc complete	5000.000	Sqm	193.00	965000.00
21	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:				
21.01	Two or more coats on new work	17000.000	Sqm	70.00	1190000.00
22	Renewing glass panes with Putty and nails wherever necessary:				
22.01	Float glass panes of thickness 4mm	150.000	Sqm	972.00	145800.00
23	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repair to scratches etc complete	233000.00	Sqm	5.00	1165000.00
24	Supplying and fixing and fittings of uPVC pipes of approved brand (Astral/Finolex/Supreme) 2.5Kg/Sq.Cm complete with fittings including cutting and making				

24.01	110mm dia Pipes	1200.000	Rm	343.00	411600.00
24.02	160mm dia Pipes	1200.000	Rm	524.00	628800.00
25	Supplying and fixing and fittings of uPVC door bend with access door of approved brand (Astral/Finolex/Supreme) 2.5Kg/Sq.Cm complete with fittings including cutting and making good the walls etc. as per direction of Engineer in Charge.				
25.01	110mm dia Pipes	200.000	Each	243.00	48600.00
25.02	160mm dia Pipes	200.000	Each	417.00	83400.00
26	Supplying and fixing and fittings of uPVC plain bend of approved brand (Astral/Finolex/Supreme) 2.5Kg/Sq.Cm complete with fittings including cutting and making good the walls etc. as per direction of Engineer in Charge.				
26.01	110mm dia Pipes	250.000	Each	209.00	52250.00
26.02	160mm dia Pipes	250.000	Each	379.00	94750.00
27	Supplying and fixing and fittings of uPVC clamp with cost of screw and fixtures of approved brand(Astral/Finolex/Supreme) 4Kg/Sq.Cm complete with fittings including cutting and making good the walls etc. as per direction of Engineer in Charge.				
27.01	110mm dia Pipes	300.000	Each	64.00	19200.00
27.02	160mm dia Pipes	300.000	Each	107.00	32100.00
28	Providing and fixing of chlorinated polyvinyl chloride (CPVC) pipes , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes fittings with one CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge(Internal work exposed on Wall) (ASTRAL/ FINOLEX/equivalent)				
28.01	15mm nominal bore	75.000	Rm	164.00	12300.00
28.02	20mm nominal bore	150.000	Rm	201.00	30150.00
28.03	25mm nominal bore	100.000	Rm	256.00	25600.00
28.04	32mm dia nominal bore	100.000	Rm	373.00	37300.00
28.05	40mm nominal bore	50.000	Rm	506.00	25300.00
29	Providing and fixing of G.I pipes complete with G.I fittings and including trenching and refilling etc (External Work)				
29.01	15mm nominal bore	100.000	Rm	238.00	23800.00
29.02	20mm nominal bore	150.000	Rm	296.00	44400.00
29.03	25mm nominal bore	200.000	Rm	379.00	75800.00
29.04	32mm dia nominal bore	50.000	Rm	419.00	20950.00
30	Finishing wall with acrylic smooth exterior paint of required shade:				
30.01	New work (two or more coat applied @1.67kg/10 Sq.M) on existing cement paint	180700.000	Sqm	64.00	11564800.00
Grand Total					24991090.0
	Say		Above(+)		24991090.0