### Name of work

# Renovation and extension of High-pressure jet facility at back side of SL-109.

**BID DOCUMENT** 



Office of the Superintending Engineer IWD, Indian Institute of Technology, Kanpur

### **Indian Institute of Technology Kanpur**

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It is certified that this document contains 70(62 + 08 page BOQ) pages starting with page no 1

Executive Engineer Institute Works Department IIT, Kanpur-208016 (U.P.)

## Name of work: - Renovation and extension of High-pressure jet facility at back side of SL-109.

The bidder Shall upload the following documents and submit the soft copy of the same mentioning the page no against each document as required in the NIT at CPP portal (Providing tick on specified document).

SI. No	Particular	Document required as per NIT	Attached as page No(s).
1.	EMD scan copy		
2.	GST Registration Certificate or GST Undertaking		
3.	ESIC Registration		
4.	EPFO Registration		
5.	PAN card		
6.	Affidavit for not being blacklisted/debarred/restrained		
7.	Performance report of works executed		
8.	Structure and Organization of the Agency		
9.	Declaration on Details of the Bidder(s)		
10.	Details of Similar Nature of Works		
	Completed		
11.	Declaration about Site Inspection		
12.	Letter of Transmittal		
13.	CPWD-7 Tender Certificate		
14. 15.			
16.	Tender Acceptance Letter Copy of Financial turnover from CA along		
10.	with audited balance sheets certified from		
	CA/bank UDIN No for current 3years.		
17.	Solvency certificate CA/Bank **		
18.	Net Worth certificate from certified chartered		
	accountant		
20.	Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs.) Any other documents		

<sup>\*\*</sup> Bank Solvency: Preferably of the Current Financial Year, but not older than one year.

#### 1. Notice Inviting e-Tenders

The Executive Engineer, IWD, IIT Kanpur invites on behalf of Board of Governors of IIT Kanpur online percentage rates tender from eligible firms/ specialized agencies satisfying the eligibility criteria mentioned in the document.

NIT No: 38/Civil/D2/2025-26

111 110	No. 36/CIVII/DZ/2023-20				
1	Name of work	:	Renovation and extension of High-pressure jet facility at back side of SL-109.		
2	Estimated cost (inclusive of GST)	:	Rs. 17,71,725/-		
3	Earnest Money Deposit(Rs.)	:	Rs. 35,435/-		
4	Duration of contract	:	Three (03) Months		
5	Last Time & date of submission of bids (Up to)	:	As per CPP portal data ( <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> )		
6	Opening of bids	:	As per CPP portal data ( <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> )		
7	Time allowed for sub- mission of requisite documents by lowest bidder		Within One week of opening of financial bids		

The bid forms and other details may be downloaded from Central Public Procurement Portal (<a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>). Aspiring bidders who have not enrolled / registered in e- procurement should enroll / register themselves before participating through web site <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Instructions for online bid submission."

Bidders can access quotation / tender documents on the website (for searching in the NIC site), kindly go to quotation search option and type 'IIT'. Thereafter, click on "GO" button to viewall IIT quotations. Select the appropriate quotation / tender and fill them with all relevant information and submit the completed Quotation / Tender document online on the website <a href="http://eprocure.gov.in/eprocure/app.">http://eprocure.gov.in/eprocure/app.</a> as per the schedule given in the next page.

Note: No manual bids will be accepted. All bids (both Technical & Financial) should be submitted in the e-procurement portal.

Applicants are advised to keep visiting the above-mentioned websites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.

Executive Engineer Institute Works Department IIT, Kanpur-208016 (U.P.)

#### 2. Information and Instructions for Bidders for E-Tendering

The Executive Engineer, IWD on behalf of Board of Governors of Indian Institute of Technology Kanpur invites online percentage rate tenders from eligible firms/ specialized agencies satisfying the eligibility criteria mentioned in the document.

#### 2.1 Schedule

1	Name of organization	:	Indian Institute of Technology, Kanpur
2	NIT No.	:	38/Civil/D2/2025-26
3	Location	:	Indian Institute of Technology, Kanpur
4	Tender / Quotation type (open / limited /EOI / Auction / Single	:	Open
5	Tender / Quotation category (services / works	:	Works
6	Type of Contract (work / supply / auction/ service / buy / empanelment / sell	:	Works
7	Form of contract (CPWD-7/8)	:	CPWD-7
8	Work Category (civil / electrical / fleet / management / computer system	•	Civil
9	Is multi-currency allowed?	:	No
10	Date of publishing / issue / start	:	As per CPP portal
11	Document download start date	:	As per CPP portal
12	Document download end date	:	As per CPP portal
13	Date & time of pre-bid meeting	:	As per CPP portal
14	Venue of pre-bid meeting	:	As per CPP portal
15	Last date & time of uploading of bids	:	As per CPP portal
16	Date & time of opening of Technical bids	:	As per CPP portal
17	Bid Validity Days	:	90 days after opening of technical bid
18	Earnest Money Deposit (EMD)	:	Rs35,435/-

19	No. of Bids / Covers (1 / 2 / 3 / 4)	:	2
20	Address for communication	:	Office of Executive Engineer, IWD, IIT, Kanpur-208016 (U. P.) Contact no. 0512-259-6253, 0512-259-6718
21	Email address	:	vpsingh@iitk.ac.in

The intending bidder must read the terms and conditions of CPWD-6 carefully. He shouldonly submit his bid if he considers himself eligible and he is in possession of all the documents required.

- 1. Information and instructions for bidders posted on website shall form part of bid document.
- 2. The bid document consisting of drawings, specifications, schedule of quantities of items to be executed, schedule of stages for payment as applicable and the set of terms & conditions of the contract to be complied with and other necessary documents can be seen and downloaded free of cost from <a href="https://www.eprocure.gov.in/eprocure/app">www.eprocure.gov.in/eprocure/app</a>
- 3. But the bid can only be submitted after the EMD hard copy submission.
- 4. Those contractors not registered on the website mentioned above, are required to get registered beforehand. Only e-bids shall be accepted in CPPP portal through e-tendering processes.
- 5. The intending bidder must have valid Class-III digital signature to submit the bid.
- 6. On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.
- 7. Contractor can upload documents in the form of PDF format.
- 8. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, if a tenderer quotes nil rates against each item in item rate or does not quote any percentage above / below / at par on the total amount of the tender or any section/ sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest

tenderer.

- 9. The "Eligibility/technical Bid" shall be opened first on due date and time as per the evaluation scheme. The "Financial Bid" of bidders qualifying the technical bid shall be opened on a later date as to be announced in CPP portal.
- 10. The bidders are advised to visit the site before submission of bids to have more clarity about the site conditions and availability of space for execution of the work.
- 11. All modifications/addendums/corrigendum's issued regarding this bidding process shall be uploaded on website only.
- 12. The department reserves the right to reject any or all bids without assigning any reason thereof and may restrict the list of qualified bidders to any number deemed suitable by it, if too many bids are received satisfying the minimum laid down criteria.
- 13. The rates for all items of work, shall unless clearly specified otherwise, include cost of all operations and all inputs of labour, material, T&P, scaffolding, wastages, watch and ward, other inputs, all incidental charges, all other taxes (inclusive of GST), cess, duties, levies etc. required for execution of the work.
- 14. The specialized works shall be in compliance with 3 star GRIHA rating and as per environmental policies of Institute. Noting extra shall be payable on this account.
- 15. The enlistment / registration of the contractors, (if applicable) should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.
- 16. The description of the work is as follows: "Renovation and extension of Highpressure jet facility at back side of SL-109"
- 17. The work is estimated to cost **Rs. 17,71,725/-**. However, this estimate given is mere approximation for guide.
- 18. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD7 which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 19. The time allowed for carrying out the entire work will be **Three (03) Months** from the date of start as defined in Schedule "F" or from the first date of handing over of the site, whichever later, in accordance with the phasing as detailed in special conditions of contract in the bid document.
- 20. The site for the work will be handed over as per the special terms and

conditions of the document.

- 21. An approval programme of completion submitted by the contractor after award of work based on the milestone given in the tender.
- 22. The bid document consisting of NIT, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.eprocure.gov.in/eprocure/app free of cost.
- 23. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
- 24. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he/she need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
- 25. Copy of documents as specified in the bid shall be scanned and uploaded to the e-tendering website within the period of bid submission.
- 26. The bid submitted shall be opened at as per the details provided in the CPP portal at IWD office. The date of opening of Financial Bid shall be informed through web site after the opening of financial bid
- 27. The bid submitted shall become invalid and e- processing fee shall not be refunded if:
  - i) The bidder is found ineligible.

### ii) If the bidder does not deposit original EMD to the office of Executive Engineer, Div-II, Central office, IWD, IIT Kanpur

- iii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
- iv) If a tenderer quotes nil rates against each item in item rate or does not quote any percentage above / below / at par on the total amount of the tender or any section/ sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 28. The contractor whose bid is accepted will be required to furnish performance guarantee of 5% of tendered value within the period specified in Schedule F. This guarantee shall be in the form of Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form.
- 29. In case the contractor fails to deposit the said performance guarantee within the period in Schedule 'F' including the extended period if any, the contractor shall be suspended for two years and shall not be eligible to bid for IITK tenders from the date of issue of suspension order.

- 30. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of afore said provisions by the sub-contractors, if any engaged by the contractor for the said work and program chart (Time and Progress) within the period specified in Schedule 'F'.
- 31. Intending Bidders are advised to inspect and examine the sites and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, making proper arrangements to the site for smooth operation, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. Bidder shall be deemed to have full knowledge of the sites whether he inspects it or not and no extracharge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Institute and local conditions and other factors having a bearing on the execution of the work.
- 32. Intending Bidders are advised to get familiarized with the specifications /rules related (i.e. Renovation and extension of High-pressure jet facility at back side of SL-109.) to the work as approved by the competent authority and various policies related to C&D waste and other environmental guidelines of the institute pertaining to the. Bidder shall be deemed to have full knowledge of such rules and regulations whether he has read it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. In case of reduction of scope of work or no work is possible to carry out on account of such issues, no cost shall be payable to them. Submission of a bid by the bidder implies that he has read this notice and all other documents and has made himself aware of the Institute Regulations and other factors having a bearing on the execution of the work.
- 33. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without assigning any reason. Bids in which any of the prescribed conditions is not fulfilled or any condition

- including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 34. Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the bidders who resort to canvassing will be liable to rejection.
- 35. The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 36. The contractor shall not be permitted to bid for works in the Institute Works Department responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive) in IWD. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Office of IWD/ Institute Works Department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 37. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government services without the prior permission of the Government of India in writing. This contractis liable to be canceled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's services.
- 38. The bids for the work shall remain open for acceptance for a period of Ninety (90) days from the date of opening of bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Institute shall, without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year
- 39. This notice inviting Bid shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 7 days from the stipulated date of start of the work, will sign the contract.
- 40. The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of

- submission of bid and acceptance thereof together with any correspondence leading thereto
- 41. Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.
- 42. The bid document will include the following components:
  - (a) CPWD-7 and CPWD-6 including Schedule A to F for all the components of the work, Standard General Conditions of Contract for CPWD 2023 as amended/modified up to last date of submission of the bid.
  - (b) General / specific conditions, specifications applicable to all components of the work.
- 43. The eligible bidders shall quote percentage rates after considering all the components of the work.
- 44. After acceptance of the bid by competent authority, the Executive Engineer, IWD shall issue letter of award on behalf of the Board of Governors to the contractor. After the work is awarded, the contractor will have to enter into one agreement with Executive Engineer, IWD. One such signed set of agreement shall be handed over to Engineer-In-Charge as applicable.
- 45. Entire work under the scope of bid shall be executed under one agreement.
- 46. The requirement of technical staff given in various specialized works is as per requirements given in clause 32 of NIT document. The actual deployment of these technical staff will be as per execution of work and direction of the Executive Engineer, IWD, IIT, Kanpur.
- 47. The bill for work components shall be facilitated by Engineer-in-Charge to the contractor.
- 48. The Final bill must be submitted to the Office of IWD, IIT Kanpur and the bills shall be based on milestones.
- 49. The work shall be treated as complete when all the components of the work are complete.
- 50. It will be obligatory on the part of bidder to sign the contract document for all components before the first payment is released.
- 51. In case of reduction in scope of work no claim on account of reduction in value of work, loss of expected profit, consequential overheads etc. shall be entertained.
- 52. A team of officers from Indian Institute of Technology Kanpur may visit the office/ site of work of bidders for establishing their credibility and verification of submitted documents
- 53. The mentioned work is urgent as requested by client/Institute and to be

completed strictlyin given time schedule as per special terms and conditions. The contractor has to deploy the labour and supervisory staff in shifts to meet the targeted completion date. The work may be executed in extended shifts or two shifts. The rates quoted by the contractor will be deemed to be inclusive of any extra expenditures on account of this reason. Nothing shall be paid on this account.

- 54. The competent authority on behalf of the Board of Governors reserves the right to terminate the contract if,
  - a) Any violation of labour law has been observed.
  - b) Any of the construction workers engaged in the works under this contract is found also engaged in Service Contracts of the Institute at the same time.
- 55. The competent authority on behalf of the Board of Governors reserves the right to disqualify an agency for
  - a) Non-compliance of Institute orders
  - b) Violation of Institute policies as established by the Competent Authority in the best interests of the Institute.

#### 2.2 Instructions for Online BID Submission

This tender document has been published on the Central Public Procurement Portal (URL: <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>) The bidders are required to submit softcopies of their bids electronically on the CPP portal, using valid Digital Signature Certificates (DSC). The instructions given below are meant to assist the bidders in registering on the CPP portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP portal.

More information useful for submitting online bids on the CPP portal may be obtained at <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>).

#### 2.2.1 Registration

- 1. Bidders are required to enroll on the e-procurement module of the Central Public Procurement portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link, "click here to enroll". Enrolment on the CPP portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for the accounts.
- 3. Bidders are advised to register their valid e-mail address and mobile number as part of the registration process. These would be used for any communication from the CPPP portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital

- Signature Certificate (class 2 or class 3 certificates with signing key usage) issued by any certifying authority recognized by CCA India (e.g. Sify / TCS / nCode/ eMudhra etc.) with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. 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.

#### 2.2.2 Searching for tender documents

- There are various search options built in the CPP portal to facilitate bidders to search active tenders by several parameters. These parameters could include tender ID, organization name, location, date, value, etc. 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 CPP portal
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. The tenders can be moved to the respective "My Tenders" folder. This would enable the CPP portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each other; in case they want to obtain any clarification/help from the Helpdesk. Preparation of bids
- 4. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 5. Please go through the tender advertisement and the tender document carefully to under-stand the documents required to be submitted as part of the bids. Please note the number of covers in which the bid documents have to be submitted. Any deviations from these may lead to rejection of the bids.
- 6. 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 / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black &white option.
- 7. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g., PAN card copy, annual reports, auditor's certificates, etc.) has been provided to the bidders. Bidders

can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### 2.2.3 Submission of bids

- 1. Bidder should 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 has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. A standard BOQ Format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the white colored [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 online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases, financial bids can be submitted in PDF format as well (in lieu of BOQ).

- 4. 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.
- 5. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done.
- 6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7. 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.

8. Add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### 2.2.4 Assistance to bidders

- 1. Any queries relating to 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. Any queries relating to the process of online bid submission or queries relating to CPP portal in general may be directed to the 24 x 7 CPP Portal Help Desk.

#### 2.2.5 General instruction to bidders

- 1. The tenders will be received online through portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. In the technical bids, the bidders are required to upload all the documents in PDF format.
- 2. Possession of a valid class II / III Digital Signature Certificate (DSC) in the form of smart card / e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> under the link "Information about DSC".

Tenderers are advised to follow the instructions provided in the "Instructions to the tenderer" for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.

Executive Engineer Institute Works Department IIT, Kanpur-208016 (U.P.)

### 2.3 List of documents to be scanned and uploaded within the period of bid submission

The following mandatory documents to be submitted with online bid submission: The Online bids (complete in all respect) must be uploaded online in two Envelops as explained here: -

#### 2.3.1 Envelope - 1: Technical Bid

The following mandatory documents to be provided as a single PDF file in the same sequenceas listed for an eligible bid:

- 1. EMD scanned copy shall be submitted along with the technical bid and original have to be submitted in the office of the tender inviting authority \*\*
- 2. GST Registration Certificate or GST Undertaking as per 5.1
- 3. EPF & ESI Registration
- 4. Copy of PAN card
- 5. Affidavit for not being blacklisted/debarred/restrained as per 5.2
- 6. Performance report of works executed as per 5.3
- 7. Structure and Organization of the Agency as per 5.4
- 8. Declaration on Details of the Bidder(s) as per 5.5
- 9. Details of Similar Nature of Works Completed as per 5.6
- 10. Declaration about Site Inspection as per 5.7
- 11. Letter of Transmittal as per 5.8
- 12. CPWD-7 as per 5.9
- 13. Tender Certificate as per 5.10
- 14. Tender Acceptance Letter as per 5.11
- 15. Financial Information as per 5.12
- 16. Solvency certificate as per 5.13 (minimum 40% of estimated cost put to tender)

  Or Net Worth Certificate from certified Chartered Accountant as per 5.14
- 17. Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs.)
  - \*\* Earnest money in the form of Demand Draft of pay order or Banker's Cheque or Deposit at Call Receipt or Fix Deposit Receipt drawn in favor of "The Director, IIT Kanpur" shall be scanned and uploaded to the e-Tendering website by the bidder within the period of bid submission. The hardcopy of earnest deposit receipt (EMD) shall be submitted in the office of Executive Engineer Div-III, central Office IWD, IIT Kanpur before the Date & time of opening of technical bids as specified in the bid document

#### 2.3.2 Envelope - 2: Financial Bid

Price bid should be submitted in BOQ format

#### 3. Eligibility Criteria

#### 3.1 Eligibility criteria for contractors

The eligible contractors mean registered in appropriate class and category with CPWD, BSNL, MES, UPPWD, Central PSUs.

#### **Eligible Bidders**

Eligible bidders should also satisfy the following criteria for an eligible bid:

**1. Average annual financial turn over**: Average annual financial turnover of composite works /civil works should be at least 30% of the estimated cost of work put to tender during the last 3 consecutive financial years by the certified Chartered Accountant. Audited turnover statements to be furnished as proof of the same duly certified by chartered accountant along with Profit & Loss Statements.

#### 2. Experience

(Firms/Contractors must have completed satisfactorily)

- i) One similar work of 80% value of the estimated cost put to tender Or
- ii) Two similar work of 60% value of the estimated cost put to tender Or
- iii) Three similar work of 40% value of the estimated cost put to tender

Works completed during last 7 years ending last day of the month previous to the one in which applications are invited.

#### And

One completed work of similar nature costing not less than the amount equal to 40% of the estimated cost put to tender with Central Government Department / Central Autonomous Body / Central Public Sector Undertakings /State Government Department.

3. Definition of similar work: Similar type of work means "Construction and/or renovation works in residential houses/ apartments/ quarters / offices/ laboratories and general civil infrastructures" done with any Central Government Department / Central Autonomous Body / Central Public Sector Undertakings /State Government / Establishment of repute in last 7.

Eligible bidders must also satisfy the following conditions and ensure submission of all documents mentioned in 2.3

- 1. **Legal:** Unregistered Partnership Firm and Joint Venture or Consortium are not eligible.
- 2. **Registration:** Bidder should be registered with the Income Tax Department (PAN), Employees Provident Fund (EPF) Organization, Employees State Insurance (ESI) Corporation & GST. Bidders are not eligible in absence of these documents.
- 3. **Office:** Bidders have to establish its local accessible office registered with local GSTIN atIIT Kanpur to run the awarded work.

#### 4. Bid Evaluation and Award

The following process will be followed for the Technical and Financial Bids Evaluation:

#### 4.1 Technical Bid Evaluation

- Technical bids received complete in all respects covering the entire scope of work, will only be opened
- The technical bid evaluation is done only for bidders who satisfy the minimum criteria by submitting documentary proof supporting eligibility criteria and the bids of agencies who have not submitted these documents are liable to be rejected without notice.

#### 4.2 Financial Bid Evaluation

For financial bids, the following points shall be followed:

- After evaluation of Pre-Qualification Documents, a list of short-listed agencies will be prepared.
- Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders ortheir representatives, if present.
- The bid shall remain valid for Ninety (90) days from date of opening of eligibility bids/Technical bid.

#### **NOTE**

The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:

- Amend the scope and value of contract to the bidder.
- Reject any or all the applications without assigning any reason.

Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

#### 5. Various Forms and Formats

#### **5.1** Undertaking regarding obtaining GST registration

Proforma for Undertaking regarding obtaining GST registration Certificate of The State in which work is to be taken up

(Undertaking to be furnished on a 'non-judicial' stamp paper worth Rs.100/)

(Scanned copy of this notarized undertaking to be uploaded at the time of submission of bid, if required)

If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in which work is to be taken up within one month from the date of receipt of award letter or before release of any payment by IITK, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by IITK or GST department in this regard.

Signature of bidder(s)
OR
(An authorized Officer of the firm with stamp)

Signature of Notary with Seal

#### 5.2 Affidavit for not being blacklisted/debarred/restrained

Proforma for AFFIDAVIT for not being blacklisted /debarred /restrained (AFFIDAVIT to be submitted on a 'Non-Judicial' stamp paper worth Rs.100/) (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

I/we undertake and confirm that our firm/partnership firm has not been blacklisted and /or debarred /restrained by any Central Govt./ State Govt. Agency/ Autonomous body of the Central or State govt./ PSU etc. Further that, if such information comes to the notice of the Institute, then I/we shall be debarred for bidding in the Institute in future forever. Also, if such information comes to the notice of the Institute on any day before date of start of work, the competent authority shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.

Signature of bidder(s)	
OR	
(An authorized Officer of the firm with stamp)	

Signature of Notary with Seal

**5.3 Performance report on work executed**Proforma of Performance report issued by the concerned department letter head)

(Scanned copy of the Performance Reports to be uploaded at the time of submission of hid)

or bid)
1. Name of work/project & location:
2. Agreement no.:
3. Estimated cost:
4. Tendered cost:
5. Date of start:
6. Date of completion:
7. Stipulated date of completion:
8. Actual date of completion:
9. Amount of compensation levied for delayed completion, if any:
10. Amount of reduced rate items, if any:
11. Performance Report:  (a) Quality of work: Outstanding / Very Good / Good / Poor
(b) Technical Proficiency: Outstanding / Very Good / Good / Poor
(c) Resourcefulness: Outstanding / Very Good / Good / Poor
(d) General Behavior: Outstanding / Very Good / Good / Poor
Signature of Executive Engineer or Equivalent
Dated:

#### **5.4 Structure and Organization of the Agency**

Proforma of providing Structure and Organization of the Bidding Agency (To be printed in Company's Letterhead)

(Scanned copy of the Structure and Organization Document to be uploaded at the time of submission of bid)

- 1. Name & address of the bidder:
- 2. Telephone no./Telex no./Fax no.:
- 3. Email address for Communication:
- 4. Legal status of the bidder (attach copies of original document defining the legal status):
  - (a) An Individual:
  - (b) A proprietary firm:
  - (c) A firm in partnership:
  - (d) A limited company or Corporation:
- 5. Particulars of registration with various Government Bodies (attach attested photocopy)

Organization / Place of registration Registration No.

- 1.
- 2.
- 3.
- 6. Names and titles of Directors & Officers with designation to be concerned with this work.
- 7. Designation of individuals authorized to act for the organization
- 8. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
- 9. Any other information considered necessary but not included above.

Signature of bidder(s)

#### **5.5** Declaration on Details of the Bidders

Proforma of Declaration on Details of the Bidders (To be printed in Company's Letterhead)

(Scanned copy of the Performance Reports to be uploaded at the time of submission of bid)

#### **DECLARATION**

I/We,.....hereby declare that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I/we have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

Particulars of the bidder as per following details:

1.	Name of the firm / organization		
2.	Name of the firm / organization	:	
<b>Z.</b>	Type of the firm / organization: Public Ltd, / Private Ltd./	•	
	,		
2	Registered firm	_	
3	Registered office	:	
4	Address of office	:	
5	Contract people	:	
6	Name & designation	:	
7	Land line & mobile no.	:	
8	Email	:	
9	PAN No.	•	
10	GST No.	:	
11	EPF Registration No.	•	
12	ESI Registration No.	:	
13	EMD/FDR/DD No. & Date		
14	Registration details with the Govt.	:	
	Department (CPWD, BSNL, MES,		
	UPPWD, Central PSUs.)		
15	Validity of the gradientian with the	:	
	Validity of the registration with the		
1.0	Govt. department		
16	Tendering limit as per the	:	
	registration details		
17		:	TC
	Has the applicant ever been	-	If so, give the name of the
	required to suspend any project		project and reasons of
	for a period of more than six		suspension of project
	months continuously after		
	Commencement of work?		
18	Has the applicant ever been	:	YES / NO, If yes give
	rias are applicant ever been		120 / 140/ 11 / C5 91VC

	convicted by a court of law?		details of the case
19	Details of any litigation in which the applicant is / was involved.	••	
20	All forms submitted as desired in the bid	••	Yes / No
21	Undertaking regarding no subletting of work.	:	

We further declare that our organization has not been blacklisted /delisted or put to any holiday by any Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.

Signature of Bidder(s) with seal

Dated:

#### **5.6 Details of Similar Nature of Works Completed**

Proforma for submission of Details of Eligible Similar Nature of Works Completed\*during the Last Seven Years ending previous day of the last date of submission of tenders (Scanned copy of the Performance Reports to be uploaded)

The contractor needs to submit the information in the following tabular format:

Sr. No	Name of work / project and location	Owne rs or spons oring organ ization		of Date of comme unce ment as per con tract	Stipula ted date of comple tion	Actual date of comple tion	Litigatio n/ arbitrati on cases pending /in Progres s with details*	Name and address / tele- phone number of officers to whom reference may be made	Whethe r the work was done on back to back basis Yes/No
1	2	3	4	5	6	7	8	9	10

<sup>\*</sup> Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of bidder(s) with seal

Dated:

#### **5.7 Declaration About Site Inspection**

**Declaration about Site Inspection** 

(By Bidder)

To The Executive Engineer, Institute Works Department, IIT, Kanpur-208016 (U.P.)

**Subject: Submission of Tender for the work of** "Renovation and extension of High-pressure jet facility at back side of SL-109 ."

Dear Sir/Madam,

It is hereby declared that as per terms and conditions of this tender document, I/ We the bidder inspected and examined the subject site and its surrounding and satisfy myself / ourselves as to the nature of the ground and sub-soil (so far as is practicable), the forms and nature of the site./ ourselves before submitting the bid, the accommodation which may require and all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid have been obtained. I/We the bidder shall have full knowledge of the site and no extra charge consequent upon any misunderstanding or otherwise shall be claimed in later date. I /We bidder shall be responsible for arranging and maintaining at own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by me/us implies that I / We have read this notice and all other contract documents and has made myself /ourselves aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

Sincerely

(Duly authorized signatory of the Bidder)

#### 5.8 Letter of Transmittal

To The Executive Engineer, Institute Works Department IIT, Kanpur-208016 (U.P.)

**Name of Work:** Renovation and extension of High-pressure jet facility at back side of SL-109

#### Dear Sir/Madam

Having examined details given in Notice and bid document for the above work, I/we hereby submit the relevant information.

- 1. I/We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statement are true and correct.
- 2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. I/We also authorize the Executive Engineer, IWD, Indian Institute of Technology Kanpur or his representative(s) to approach individuals, employers, firms and corporation to verify our competence, work experience, and general reputation.
- 4. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible completed works:

	<u> </u>				
SI. No.	Name of work	Amount	Certificate issued by		
1					
2					
3					

#### **CERTIFICATE**

It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I/We shall be liable to be debarred, disqualified/ cancelation of enlistment in case any information furnished by me/us found to be incorrect.

	Signature(s) of Bidder with seal
Enclosures:	Date:

#### 5.9 CPWD-7

#### CPWD-7

#### PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

**Tender for the** "Renovation and extension of High-pressure jet facility at back side of SL-109 ."

- 1. To be uploaded as per details uploaded in CPP portal at www.eprocure.gov
- 2. To be opened in the presence of tenderers who may be present at the time of opening in the Executive Engineer, IWD, IIT Kanpur.
- 3. The pre-qualification/Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.

#### **TENDER**

(To be signed in Company's Letterhead)

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, General Conditions of Contract (For construction works) 2023, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Board of Governors within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for Ninety (90) days from the due date of its opening and not to make any modification in its terms and conditions.

I/We have deposited EMD for the prescribed amount in the office of concerned Executive Engineer as per the bid document

If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said Board of Governors or his successors, in office shall without prejudice to any other right or remedy, be at liberty to take action as per GCC 2023. Further, if I/We fail to commence work as specified, I/We agree that Board of Governors or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to

execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clauses 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work

I/We undertake and confirm that eligible similar work(s) has/have not been gotexecuted through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in Indian Institute of Technology Kanpur in future forever. Also, if such a violation comes to the notice of Indian Institute of Technology Kanpur before date of start of work, the Executive Engineer, IWD shall be free to forfeit the entire amount of Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety & integrity of IIT Kanpur.

Signature(s) of Contractor(s) with seal

#### **5.10 Tender Certificate**

(To be given on Company Letter Head)

	Date:
To,	
Executive Engineer,	
IWD, IIT,	
Kanpur-208016(U.P.)	
Sub: Certificate of compliance as per Rule 144 (xi) GFR's 2017 Tender Reference No:	
Name of Tender / Work:	
Danu Ciu	
Dear Sir,	

- 1. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"
- 2. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on subcontracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all the requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

Yours Faithfully,

(Signature of the Bidder(s), with Official Seal)

#### **5.11 Tender Acceptance Letter**

(to be give on company letter head)

To, The Superintending Engineer IWD, IIT, Kanpur

Sub: Acceptance of terms & conditions of tender. Reference no.

Name of Tender	/ Work:	

Dear Sir,

I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: as per your advertisement, given in the above-mentioned website(s).

I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No....... to (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.

- I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.
- I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.
- I / We certify that all information furnished by our Firm is true & correct and, in the event, that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,
(Signature of the Bidder, with Official Seal)

#### **5.12 Financial Information**

#### **Proforma for providing Financial Information**

(Scanned copy of the completed information sheet to be uploaded at the time of submission of bid)

Financial Analysis: Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last three financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

<b>Financial Years</b>	2022-23	2023-24	2024-25
Gross Annual			
turnover			
Profit/Loss			

Signature of Chartered Accountant with Seal

Signature of bidder(s)

## **5.13** Banker's Certificate from a scheduled Bank

## **Proforma of Banker's Certificate from a Scheduled Bank**

(To be printed in Bank's Letterhead)
(Scanned copy of the Certificate to be uploaded at the time of submission of bid)

This is to certify that to the best of our knowledge and information that M/s./Sh having
marginally noted address, a customer of our bank are/is respectable and can be treated
as good for any engagement up to a limit of Rs (Rupees ). This
certificate is issued without any guarantee or responsibility on the bank or any of the
officers.
(Signature for the Bank)

## NOTE:

- 1. Bankers certificates should be on letter head of the Bank, addressed to tendering authority.
- 2. In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

# **5.14** Net Worth Certificate by certified Chartered Accountant

## **Proforma of Net Worth Certificate by certified Chartered Accountant**

(To be printed in Letterhead of Chartered Accountant) (Scanned copy of the Certificate to be uploaded at the time of submission of bid)

This is to certify that as per the audited Balance Sheet and Profit & Loss state-
ment of the account during the financial year, the net worth of
M/s./Sh(Name & Registered
A d -
dress of individual/firm/company) as on 31.3.2024 is Rs(Rupees
) after considering all liabilities. It is further
certified that the net worth of the company has not eroded by more than 30% in the last
three years ending on 31.3.2024.
(Signature of the Chartered Accountant)
( <b>3</b>
(Name of the Chartered Accountant)
(Membership No. of ICAI)
(Date & Seal)

## **6** Proforma of Schedules

# Operative schedules shall be supplied separately to each intending tenderer

SCHEDULE "A"	Schedule of Qty	Uploaded separately
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## SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
NIL				

## SCHEDULE 'C'

Schedule of Tools and Plants to be hired to the contractor

S.	Description		Hire charges per	day	Place of issue
No.					
1	2		3		4
			NIL		
SCHE	EDULE "D"	Extra	schedule for	specific	As attached in
		require	ments/document	for the	tender form.
		work, if	any:		
SCHE	EDULE "E"	Schedu	le of component	of other	N. A.
		Materia	ls, Labour, POL etc	. for price	
		escalati	on		
SCHE	<b>HEDULE "F"</b> Referen		nce to General Conditions of		
		contract.			
Name	e of Work:	Renovation and extension of High-pressure jet facility at back side of SL-109			
Estin	nated cost of	Rs. 17,71,725/ -			
the v	vork:				_
Earn	est money	Rs. 35,435/-			
Perfo	ormance	5% of the tendered value of the work		·k	
Guar	antee				

Security Deposit	2.5% of the tendered value of the work

# **General rules and direction:**

Officer inviting tender	Executive Engineer, IWD, IIT, Kanpur
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## **Definitions:**

2(vi)	Engineer-in-charge	
	For civil item works	Executive Engineer,
		IWD, IIT Kanpur
2(viii)	Accepting authority	Superintending Engineer,
		IWD, IIT Kanpur
2(x)	Percentage on cost of	<mark>15%</mark>
	materials and labour to cover	
	all overheads and profits	
2(x)(b)	Standard Schedule of Rates:	D.S.R. 2023-GST with up
	Civil Items of Work:	to date correction Slips
2(xi)	Department	IWD, IIT Kanpur
9(ii)	Standard CPWD contract	<b>,</b>
	Form:	CPWD form-7 as modified
		& corrected up to date.
		(Whether correction vide
		latest circulars are in
		corporate or not in this
		document). The following
		condition pertains to GST
		of clause 37 & 38 of
		General Condition of
		contract and
		corresponding
Clause 1	i) Time allowed for	7 Days
	submission of	. 24,5
	Performance Guarantee	
	from the date of issue of	
	letter of acceptance ii) Maximum allowable	
	ii) Maximum allowable extension with late fee	7 Days
	@0.1% per day of	,

	noufoumon o outrus aboo			
	performance guarantee amount beyond the			
	period as provided in i)			
	above			
Clause 1A	Recovery of Security Deposit	Applicable.		
Clause 2	Authority for fixing SE, IWD, IIT, Kan			
	Compensation under Clause 2	Or successor thereof		
Clause 2A	Whether Clause 2A shall be	Yes		
	applicable			
Clause 5	<ul> <li>i) Number of days from the date of issue of letter of acceptance for reckoning date of start</li> <li>ii) Time allowed for execution of work</li> </ul>	Throa (02) Months		
i)	Number of days from the	15 days		
	date of issue of letter of			
	acceptance for reckoning			
	date of start			
ii)	Mile stone	Time allowed for		
		execution of work along		
		with the amount to be		
		withheld in case of non-		
		achievement of		
		milestone are shown in		
		Tables 6		
Authority to decide	Extension of time	EE/SE, IWD, IIT, Kanpur. Or successor thereof		
Clause 6A	Computerized Measurement of bills			
Clause 7	Payment on intermediate	APPLICABLE		
	certificate to be regarded as			
	Advances			
Clause 10A	Material to be provided by the	APPLICABLE		
	contractor			
Clause 10B (ii),	Whether clause 10-B (ii) and	NOT APPLICABLE		
(iii)	10-B (iii) shall be applicable.	INOT AFFLICABLE		

Clause 10 C	Component of labour expressed as percentage of value of work	NOT APPLICABLE		
Clause 10 CA	Materials covered under this clause Nearest Material for which All India Wholesale Price Index is to be Followed	NOT APPLICABLE		
Clause 10 CC	Increase/Decrease in Price of materials/wages	NOT APPLICABLE		
Clause 11	Work to be Executed in Accordance with Specifications, Orders etc.	CPWD Specifications of all Civil items(CPWD Civil specification vol.1 and vol.2, 2019), with correction Slips issued up to the last date of receipt of tenders and as per NIT for Civil Works.		
Clause 12: Type of work		Original work.		
Clause 12.2 & 12.3: Deviation limit beyond which clause 12.2 & 12.3 shall apply for Building works	Apply for building work	30%		
Clause 16	Competent Authority for deciding reduced rates: For Civil items	S.E., IWD IITKANPUR		
Clause 17	Defect liability period	One year		
Clause 18	List of mandatory machinery, tools & plants to be deployed by the contractor at site	As per site requirement		
Clause 32	Requirement of Technical Representative(s)	As per table 9		
The details of appointed engineers/technical staffs have to be verified and				

approved by Engineer- in-charge

	Table 6 Major milestones of the project				
SI. No.	Description of Milestone (Physical)	Time allowed fromdate of start	Maximum duration of work	Amount to be withheld in case of non achieve of the milestones (% of composite tendered amount)	
1.	Renovation and extension of High-pressure jet facility at back side of SL-109	12 weeks	12 weeks	1 %	

The detailed program chart approved by the engineer-in-charge shall indicate how the resources will be deployed by the contractor to maintain desired progress and for the completion of the work within the specified period. If the submitted program is approved, the milestone shall be redefined accordingly by the Superintending Engineer, IWD Indian Institute of Technology Kanpur. The amount to be withheld in such a case, for non-achievement of milestone(s), shall remain unaltered i.e., 1% of tendered amount

1.	Time allowed for execution of work	Three (03) Months
	Table 7	
	Authority to decide	
1.	Extension of time (EOT)	EE/ SE, IWD IIT Kanpur
2.	Rescheduling of milestones	SE, IWD, IIT, Kanpur
3.	Shifting of start in case of delay in handing over of site.	SE, IWD, IIT, Kanpur

#### Table 8:

Materials for which all India Wholesale Price Index to be followed Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed)

SI. No.	Material covered under this clause	Base Price (with GST) of Materials, covered under
	ciause	clause 10 CA
1.	Portland Pozzolana Cement	
	(PPC)/ Ordinary Pozzolana	
	Cement	
2.	Steel for Reinforcement TMT	NIL
	Fe 500D primary	
	manufacturer	
3.	Structural steel (Primary producers)	NIL

Table 9
Requirement of Technical staff as per Clause 32

	<u>Requirement</u>	t of recili	icai staii as	pei Ciause	<b>3</b> 2
Sl. No.	Qualificati	Number	Minimum	Designati	Rate at
	on		Experience	on	which the
			in years		recovery
					shall be
					made from
					the
					contractor in
					the event of
					not fulfilling
					provision of
					Clause 32
1.	Graduate /	1	5	Project /	Rs. 25000/-
	Diploma			Planning /	(Rupees
				constructi	Twenty Five
				on / billing	Thousand
				Engineer	only) per
				(Civil)	month, per
					person

Note: Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 years relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineer.

# RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

SI No	Description of	Rates in figures and words at which recovery shall be made from the contractor				
SiNO	items	Excess beyond permissible variation	Less use beyond the permissible variation			
1.	Cement (PPC)	Double the Issue rate	Double the Issue rate			
2.	Steel reinforcement (TMT Bars)	Not Applicable	Not Applicable			

#### 7. Terms & Conditions of Contract

## 7.1 Timely Completion

- 1. The work included in this tender is of urgent nature.
- 2. The work of all components must be started simultaneously and has to be delivered together or early within the given time schedule.
- 3. The contractor has to deploy the labor and supervisory staff in shifts to meet the targeted completion date. The work may be executed in extended shifts or two shifts.
- 4. Number of days from the date of issue of letter of acceptance for reckoning date of start shall be as per Schedule. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited.
- 5. The detailed program chart approved by the engineer-in-charge shall indicate how the resources will be deployed by the contractor to maintain desired progress and for the completion of the work within the specified period. If the submitted program is approved, the milestone shall be redefined accordingly by the Executive Engineer of IWD, IITK. The amount to be withheld in such a case, for non-achievement of milestone(s), shall remain unaltered. Any delay in achieving the milestone must be compensated within the limitations of time imposed in the Contract document
- 6. The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work, as required.

#### 7.2 Rates

- 1. Unless otherwise provided in the schedule of quantities of the work the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building (Inclusive of GST) and nothing extra shall be payable to him on this account.
- The rates for all items of work shall, unless clearly specified otherwise, include cost of all labours, materials and other inputs involved in the execution of the item irrespective of whether they have been specifically mentioned in the tender document or not.
- 3. In case the same item (s) appear more than once in the schedule of work / BOQ under the same sub head or among the different subhead of works, the lowest rate quoted for that item (s) shall be considered for the particular item(s) wherever appeared in any part of BOQ / Schedule of works for the purpose of tender evaluation although web generated e-price bid may incorporate different quoted rate for same item(s) as per the quoting pattern

- of the tenderer. The tendered amount thus worked out shall be final &shall be binding on the contractor.
- 4. The rates quoted by the contractor will be deemed to be inclusive of any extra expenditure of this reason. The contractor has to increase the manpower or other tools etc. to do the work as per requirement of the work at his own expenses. Nothing shall be paid on this account.
- 5. The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 6. Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 7. All materials shall only be brought at site as per advice and prior approval of the Engineer-in- Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 8. Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to approved manufacturers specifications where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested from approved labs wherever required at his own cost.
- 9. The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the client department. No extra payment shall be made on this account.
- 10. The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark(s), taking spot levels, construction of all safety and protection devices, barriers, preparatory works, working during monsoon, working at all depths, height, lead, lift and location etc until / unless specified otherwise and any other incidental works required to complete this work. Nothing extra shall be payable on this account.

## 7.3 Quality and Workmanship

- The contractor shall be entirely responsible and answerable for all the works done by him regarding quality, adherence to the laid down specifications, terms and conditions, warranty/guarantee etc. and he shall be liable to bear any compensation that may be levied by the department under any of the clauses of the agreement.
- 2. The materials having ISI mark shall have precedence over the one conforming to ISSpecifications.
- 3. The proposed is for Institute premises and quality of work is paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T & P and other equipment to execute the work.
- 4. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 5. All materials used in the work shall be new and of good quality, conforming to the relevant specifications as per good engineering practice. All the materials proposed to be used in the work should be approved from Engineer in Charge before use in work.
- 6. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS/ISI mark for the particular material. Any material/fitting whose sample has not been approved in advance and any other unapproved material brought by the contractor shall be immediately removed as soon as directed. Where the make of any particular material is not specified in the Contract document, the material shall be supplied as per makes desired by the engineerin-charge.
- 7. It will be the responsibility of the contractor / bidder to ensure use of genuine materials in the work. The department reserves the right to get (any / all materials / components) inspected by the manufacturer or their authorized representatives at any stage of the execution of work. If any of the materials, supplied and used in work is found spurious atany stage, then the department reserves the right to ask the contractor to replace it by genuine one and make suitable recovery till it is done, even if any payment against that material is already made.
- 8. No material to be brought and used at site without the prior knowledge & approval of Engineer-in-Charge.
- 9. The department may ask for any valid document like manufacturer's test certificate, document for purchase of the material, document for import/shipment

of imported materials etc. as deemed fit by the engineer-in- charge to ascertain genuinely of material supplied by/used in the work by the contractor. The contractor shall remain bound to submit all such documents to the department failing which payment may not be made or if already paid may be recovered/ withheld from subsequent running account payment.

- 10. All equipment and their components, and all the materials to be used in the work shall besuitable for the environmental conditions at the location of the work.
- 11. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 12. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
- 13. The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. The said cost of tests shall be borne by the contractor/department in the manner indicated below.
  - a) By the contractor, if the results show that the test does not conform to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
  - b) By the department, if the results conform to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
- 14. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till

the completion of the work.

- 15. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
- 16. BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate or test certificate from approved testing laboratory to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
- 17. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 18. All the material brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 19. The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.

## 7.4 Natural calamity:

No payment will be made to the contractor for any damage caused by rain, snow fall, floods, dampness, fire, sun or any other natural cause whatsoever during the execution of work. The damage to the work due to above reason, if any, shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.

## 7.5 Stocking and Disposal of Materials & Debris

- 1. The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc. are to be constructed.
- 2. After completion of work the agency shall remove materials and debris etc. from site as per the direction of Engineer-in-Charge, at no extra cost.
- 3. Contractor's job will also include removing of all malba and debris arising in the process of painting including washing of floor to remove stains of paint, at no extra cost.

- 4. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 5. For construction/renovation works which are likely to generate malba/rubbish to the tune of more than a tempo/truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at their own cost to the notified/specified dumping ground and under no circumstances these shall be stacked/dumped, even temporarily outside the construction.
- 6. Dismantled but useful materials/components/equipment, if any, should be returned to the Institute as per the direction of Engineer-in-Charge.

## 7.6 Painting

- 1. Contractor will thoroughly clean all paint marks left here and there due to spilling and splashes of paint at no extra cost.
- 2. Contractor will first submit the shade cards of relevant make of paint to IIT for approval of color before procuring the paint in bulk.
- 3. No mixing will be allowed with Stainer to achieve a particular color. Contractor will procure direct colour paint of approved shade and apply directly.
- 4. Contractor shall have to brought at least 50% quantity of total premium acrylic smooth exterior silicon additives paint and water proofing cement paint and shall deposit it in the custody of concerned site Engineer before start of work. The consumption shall be monitored by the Institute. All empty drums shall have to be kept till completion of the work.
- 5. Contractor has to make a sample of exterior painting on the surface of wall and after getting approval from the competent authority. The contractor has to finish the rest of work accordingly as per satisfaction of Engineer-incharge.

## 7.7 Safety and Security

- 1. The contractor has to follow all safety norms as laid down in National Building Code of India. All the workers shall be equipped with the required safety gadgets while working at site such as ISI marked helmets, Shoes and safety belts, gumboots, gloves etc.
- 2. The contractor, the authorized representative(s), workmen etc., shall strictly

- observe orders pertaining to fire precautions prevailing in the area.
- 3. The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 4. Contractor will arrange proper metal ladders, M.S. double scaffolding (for working, painting, etc. at higher levels) at his own cost and will take all safety measures like double harness safety belt, mechanized electrically operated platform etc. If it is observed that work is proceeding without adequate safety precautions, work may be stopped by Engineer-in- charge and in such cases, contractor will be solely responsible for delay and its consequences thereof.
- 5. The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 6. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit boards red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
- 7. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 8. The Institute shall not have any responsibility or liability in case of any accident injury to the personnel to the contractor at work site or to the general public at the work site due to mishandling equipment by the personnel of the contractor or any other similar reason. The responsibilities and liabilities for such accidents and incidents shall be borne by the contractor.

## 7.8 Approach to Site

- The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 2. Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

## 7.9 Water and Flooding

1. The contractor shall have to arrange water of desirable quality for the

- construction purpose for which he may have to install water purifier at site or might have to bring/ purchase water from outside as per decision of Engineer-in-charge. Nothing extra shall be paid on this account.
- 2. For works below ground level the contractor shall keep that area free from water. If dewatering or bailing out of water is required the contractor shall do it and nothing extra shall be paid except otherwise provided in the items of schedule of quantity.
- 3. In case of flooding of site on account of rain or any other cause and any consequent damage, whatsoever, no claim financially or otherwise shall be entertained not withstanding any other provisions elsewhere in the contract agreement. Also, the Contractor shall make good, at his own cost, the damages caused, if any.
  - 4. The water charges (for water connection) shall be borne by the contractor.

#### 7.10 Acts and Laws

- The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / MC etc. and any other statutory bodies shall be adhered to, by the contractor, during the execution of work.
- 2. The Contractor shall also adhere to all traffic restrictions notified by the local authorities.
- 3. All statutory taxes, levies, charges (including water and sewerage charges, charges for temporary service connections and / or any other charges, as applicable) payable to such authorities for carrying out the work, shall be borne by the Contractor.
- 4. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and shall pay to such authority all the fees that is required to be paid for the execution of work. He shall protect and indemnify the Institute and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself/herself or by his/her employees or his/her authorized representatives. Nothing extra shall be payable on these accounts.
- 5. The fee payable to statutory authorities for obtaining the various permanent service shall be borne by the Institute.

#### 7.11 Labour and Laws

- 1. The Contractor shall display all permissions, licenses, registration certificates, bar charts, other statements etc. under various labour laws and other regulations applicable to the works, at his site office.
- 2. Huts for labour are not permitted within the premises of the Institute. No extra cost shall be payable even if the contractor provides such accommodation at a place as is acceptable to the local body.

## 7.12 Nondisclosure Agreement.

- The Agency shall take all precautions not to disclose, divulge and/or disseminate to any third party any confidential information, proprietary information on the Institute business or security arrangements (including but not limited to the Assignment instructions, Schedules and other subsequent Arrangements) and/or business of the Institute. The obligation is not limited to any Scope and the Agency shall be held responsible in case of beach of the confidentiality of Institute's information.
- 2. If the Agency receives enquiries from Press/Media/Radio/Television or other bodies / persons, the same shall be referred by the Agency to Institute immediately on receipt of such queries.

#### 7.13 Indemnification:

- The agency shall be directly responsible to indemnify the Institute against all charges, dues, claims, etc. arising out of the disputes relating to the dues and employment of the personnel deployed and further for any claim/compensation against all damages and accidents caused due to negligence on the part of the agents, employees and other personnel of the agency.
- 2. That the contractor shall keep the IITK indemnified against all claims whatsoever in respect of the employees deployed by the contractor. In case any employee of the contractor so deployed enters in dispute of any nature whatsoever, it will be the primarily responsibility of the contractor to contest the same. In case IITK is made party and is supposed to contest the case, IITK will be reimbursed for the actual expenses incurred towards Counsel Fee and other expenses which shall be paid in advance by the Contractor to IITK on demand. Further, the contractor shall ensure that no financial or Any other liability comes on IITK in this respect of any nature whatsoever and shall keep IITK indemnified in this respect.

#### 7.14 Force Majeure:

If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosion, epidemics guarantine restriction, strikes, lockouts or acts of god (hereinafter referred to as events) provided notice of happenings of any such event, is served by party seeking concession to the other as soon as practicable, but within 21 days from the date of occurrence and termination thereof. Provided the Party satisfies Institute adequately of the measures taken by it. Neither party shall, by reason of such event, be entitled to terminate this contract, nor shall either party have any claim for damages against the' other in respect of such non-performance or delay in performance. Further, the services under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of Institute as to whether the services have to resume or not shall be final and conclusive, provided further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, Institute may at his option, terminate the contract.

## 7.15 Dispute resolution

- 1. The institute reserves the right to amend rules whenever and wherever considered necessary and appropriate. The same shall be intimated to the agency in due course.
- 2. Any dispute arising out of and in relation to this agreement shall be referred to the arbitration by sole arbitrator to be appointed by Director of the Institute. The arbitration would be conducted and governed by and under the provisions of Arbitration Act, 1996 and its amendments. Any legal dispute will be subject to jurisdiction of Kanpur Courts only and no other court shall have the jurisdiction.
- 3. Any dispute arising out of and in relation to this agreement shall be referred to the arbitration by sole arbitrator to be appointed by Director of the Institute. The arbitration would be conducted and governed by and under the provisions of Arbitration Act, 1996. Any legal dispute will be subject to jurisdiction of Kanpur Courts only and no other court shall have the jurisdiction.

#### 7.16 Arbitration

1. Except as otherwise provided anywhere in this Agreement, if any dispute, difference, the question of disagreement or matter, whatsoever, arises between the parties, as to the meaning, operation or effect of the Agreement or out of or relating to the Agreement or breach thereof, the

- same shall be referred to a Sole Arbitrator, to be appointment by the Director of the Institute at the time of the dispute.
- 2. If the Arbitrator, to whom the matter is originally referred, dies or refuses to act or resigns for any reasons from the position of arbitration, it shall be lawful for the Director of the Institute to appoint another person to act as Arbitrator in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by its predecessor, provided both the parties consent to this effect, failing which, the arbitrator shall be entitled to proceed on the matter de-novo.
- 3. It is a term of the Agreement that the party invoking the arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration under the clause.
- 4. It is a term of the contract that the cost of arbitration shall be borne by the parties themselves.
- 5. The place of the arbitration shall be Kanpur Nagar, Uttar Pradesh, India.
- 6. Subject as aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications, amendments or re-enactment thereof and rules made the reunder and for the time being in force, shall apply to the arbitration proceeding under this clause.
- 7. Except as otherwise provided anywhere in this Agreement, the Arbitration proceedings shall be conducted in English and the Agreement shall be constructed, interpreted and governed by the law of India, for the time being in force.

#### **7.17 Jurisdiction of Courts**

The court(s) at Kanpur Nagar, Uttar Pradesh, shall have the exclusive jurisdiction to try any asall the disputes(s) between the parties arising out this Agreement.

#### 8. Scope of work

The Institute desires to renovate/Construct and do other associated works in the institute. This project aims to complete such renovation works on a timely basis.

#### 8.1 Brief of the works

The work included in this contract will be as follows:

1. Renovation and extension of High-pressure jet facility at back side of SL-109.

#### Sub Heads:

- 1. Earth work excavation.
- 2. Foundation and superstructure brick work.
- 3. Structural steel work and M.S sheet door.
- 4. Vitrified tiles flooring and false ceiling.
- 5. Profile sheet roofing with under deck insulation.
- 6. Alu. window with insulated glass and sound proof wall paneling.
- 7. Internal & external Painting.

But this work is indicative. The contractor should be able to execute work within the deviation limit of the contract value on same terms and conditions of the contract.

Note: The scope of the works listed above is indicative only. For the details of the works, please refer to the BoQ and the work has to be done strictly as per the specifications in the BoQ.

#### 8.2 Materials Verification

The contractor shall inform the Engineer in charge in advance, for verifying the measurement of the concealed items if any like reinforcement bars, pipes laying etc., done by the contractor on the very day of the above said events.

## 8.3 List of Preferred Makes for Civil Works (as applicable)

Preferred makes of materials to be used in the work are as under. In case of non-availability of these makes, the Engineer-in-charge may allow use of alternative BIS makes of materials in the work. Non-BIS marked materials may be permitted by the Engineer-in-charge. This is a general list of makes. All makes applicable as per Schedule of Quantities must be as per the Institute preferred make.

SI.	Material description	Manufacturer / Brand Name
No.	•	•
1.	Ready Mix Concrete	Ultratech Concrete, ACC Ready Mix and RMC India
2.	Cement (PPC/OPC)	ACC, Ultratech, Vikram, Shree Cement, Abuja, JK Cement, Century Cement, Jaypee Cement & Prism Cement.
3.	White Cement	Birla White, J.K. White
4.	Reinforcement Steel	SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd. and JSW Steel Ltd
5.	Water proofing compounds, admixtures, plasticizer, super plasticizer, curing compounds	Fosroc, ROFF/Dr. Fixit (Pidilite Industries), STP Ltd., Sika, BASF, Ardex Endura & Parma Construction Aids Pvt. Ltd.
6.	Integral water proofing compound with cement (for plaster & mortar)	Fosroc: Conplast 421, Dr. Fixit: LW+, Sika: Sikacim, Asian Paint: SmartCare Vitalia & equivalent product of BASF, STP Ltd., Ardex Endura, Perma Construction Aids Pvt. Ltd.
7.	Water proofing com- pound for bathroom/ toilet /balcony & other wet area	Fosroc: Bush Bond, STP Ltd.: Shalicrete, CICO: Tapecrete, Dr. Fixit: Pidifine 2K, Sika: Topseal 107, Asian Paints: Damp Block 2K & equivalent
8.	Crystalline water proofing compound	Product of BASF, Ardex Endura, Perma Construction Aids Pvt. Ltd. Fosroc: Bushbond TGP, Dr. Fixit: Dr. Fixit Krystalline, Sika: Sika 101h, Asian Paints: SmartCare & equivalent product of BASF, Ardex Endura, STP Ltd., Perma Construction Aids Pvt.
9.	Grouts, Tile Adhesive	Laticrete, STP Ltd., Kajaria, BASF, Perma, Ardex Endura, JK White & Ferrous Crete.
10.	Structural steel	SAIL, Tata Steel, Rashtriya Ispat Nigam Ltd. (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
11.	Polycarbonate sheet	GE Plastic, LEXAN & MG Polyplast
12.	Profile steel sheet	Ezydeck of TATA, Lloyd Superdeck, JSW, Jindal
13.	Particle board	Action TESA, Merino, Archidply & Orion Doors
14.	Laminates	Action TESA, Greenlam, Century Ply, Merino, Archidply, Virgo & Orion doors

15.	Flush door shutters	Duro, Century, Durian, Archidply, Green Ply, JAYNA (Jain Wood Industries), Jain Doors Pvt. Ltd., GREENPANEL & Orion Doors Note: Only ISI marked flush door shutters to be used.
16.	Fire rated doors	Signum fire protection, Shakti Metdoor, NAVAIR, Promat, Thrislington, Sukri & Bhawani. If fire rated glass is integral part of fire rated door than it should be of one of the following makes: Pyroguard, Saint Gobain, Asahi India, Pilkington & Schott
17.	False ceiling system	Armstrong, USG Boral, Saint Gobain, Aerolite, Interarch, Hi- steel of PR Ceiling Products
18.	Plywood / Veneer	Greenply, Century, Merino, Durian, Archidply, GREENPANEL & Orion Doors.
19.	Melamine polish	Asian Paints melamine gold, Wudfin of Pidilite & Timbertone of ICI dulux.
20.	Floor spring & door closer	Godrej, Dormakaba, Dorset & Kich
21.	Aluminum section	Hindalco, Jindal & Indian Aluminium Co.
22.	Anodized aluminum hardware (Heavy Duty)	Kilon, Alualpha, Classic & Ebco.
23.	Clear / Float/Frosted/Toughen Glass/ Refractive glass	Saint Gobain, AIS & Modiguard
24.	Stainless steel railing, Accessories etc.	JINDAL, Dormakaba, Kich, GEZE, Godrej & Hardwyn
25.	SS fittings for doors & window	Jindal, Dormakaba, Kich, Dorset, Godrej, Ozone & Define
26.	Silicon based water repellant /weather sealant	GE Plastics, STP Ltd., Dow Corning, Waker, BASF & Pidilite (Dr. Fixit/ Roff
27.	Poly-Sulphide Sealant	Fosroc, STP Ltd., Pidilite (Dr. Fixit/Roff), Sika & BASF
28.	Mosaic tiles/Chequered Tiles	Ultra Tiles, NITCO, Hyper, Mayur & Pavcon,
29.	Glazed Ceramic Tiles	Kajaria, NITCO, Orient Bell, Johnson, Somany, RAK & Varmora
30.	Vitrified Tiles (Antiskid /Matt /Glazed)	Kajaria, NITCO, Orient Bell, Johnson, Somany, RAK, Varmora & Restile
31.	Paver block & Kerbstone	Pavcon, Hyper, Mayur, KK, Power, Sharda & Navya
32.	Cement Based wall putty	Asian Paints, Birla Wall Care, JK, White & Ber- ger
33.	Oil bound washable dis temper / dry distemper	Asian Paints (Professional Acrylic Distemper), Nerolac: Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper& Dulux ICI: Maxilite

34.	1st quality acrylic	Asian Paints (Tractor Aqua Lock Paint), Berger:
	distemper (washable/ ready mix / Low VOC)	Commando or equivalent paints of Nerolac & ICI- Dulux
35.	Acrylic emulsion paints	Asian Paints: (Professional Premium Interior, Emulsion Paint), Nerolac: Beauty Gold, Berger: Rangoli Total Care & ICI Dulux: Super Cover, Indigo
36.	Plastic emulsion paint	Asian Paints: (Apcolite Heavy Duty Premium Emulsion Paint), Nerolac: Impression, Berger: Easy Clean & ICI Dulux: 3 in 1
37.	Premium acrylic emulsion paints (Interior)	Asian Paints: (Royale Luxury Emulsion), Nerolac: Impression, Berger: Silk & ICI Dulux: Vel-vet Touch, Indigo
38.	Textured exterior paint	Asian Paints, Nerolac, Berger Paints, Ultratech Paints &Luxture
39.	Acrylic smooth exterior paint	Asian Paints: (Apex/Professional Premium Exterior Emulsion), Nerolac: XL, Berger: Weather Coat & ICI Dulux: Weather Shield, Indigo
40.	Premium acrylic smooth exterior paint with sil- icon additive	Asian Paints: Apex Ultima, Nerolac: XL total, Berger: Weather Coat all Guard & ICI Dulux : Weather Shield Max
41.	Synthetic Enamel Paint	Asian Paints: Apcolite Premium Gloss Enamel, Nerolac: Synthetic Hi gloss, Berger: Luxol Hi gloss & ICI Dulux: Gloss Synthtic enamel.
42.	Cement Primer	Nerolac, Berger (BP white), STP Ltd., Asian (Decoprime WT) & ICI (White primer).
43.	Steel primer (Red OxideZinc Chromate Primer)	Asian Paints, Nerolac, Berger & ICI
44.	Wood primer	Asian Paints (wood primer - White/Pink), Burger, ICI & Nerolac
45.	Epoxy paint	Asian Paints, STP Ltd., Nerolac, Berger, ICI, Kansai, & Akzo Nobel
46.	Fire paint	Asian paint, STP Ltd., Akzo Nobel, PROMAT, & JOTUN
47.	GI/MS Pipe	Tata, Jindal (Hisar) & Prakash Surya
48.	GI Fittings	Unik, AVR & Zoloto
49.	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST & Supreme
50.	DI Pipes & fittings	Electrosteel, Jindal, TATA DUCTURA, Kapil Ansh & & Kesoram
51.	UPVC pipe and fittings	Astral, Supreme, Prince, M/s Skipper Ltd, Ashirwad &Prayag Polymers Pvt. Ltd
52.	SW Pipes (BIS approved)	Anand, Parry & Perfect
53.	Centrifugally Cast (Spun) Iron Pipes & Fittings /Hub less pipes & fittings	NECO, BIC, Kapilansh, SKF, Raj Pattern Makers & Founders Pvt. Ltd. or any other ISI marked make

54.	CI Manhole covers, frames & GI Gratings	NECO, BIC, SKF & Kapilansh,
55.	SFRC Manhole covers & gratings	K K Jain & Pragati
56.	CP brass fittings (Superior range)	Jaquar, Grohe & Roka.
57.	CP brass fittings (Nor- mal Range)	ESSCO (by Jaquar), Parryware, CERA, Kerovit (Kajaria), Johnson & Prayag Polymers Pvt. Ltd.
58.	Sanitary ware, fittings & accessories	Kerovit (Kajaria), CERA, Jaquar, Parryware, Hindware & Prayag Polymers Pvt. Ltd.
59.	Mirror glass	Atul, Modi Guard & Golden Fish
60.	CPVC Pipe & fitting	Astral, Superme, Prince, M/s Skipper Ltd., Ashirwad & Prayag Polymers Pvt. Ltd.
61.	Stainless steel sink	Neelkanth, Niralli, Jyna & Prayag Polymers Pvt. Ltd.
62.	FRP doors shutters & frame	Jayna, Fiberways, Jain Doors Pvt. Ltd. & Selected Product Co,
63.	Extruded polystyrene insulation board	Dowcorning, Supreme, Texas & Analco
64.	Gypsum plaster	Ferrous Crete, Gyproc Saint Gobain, Ultra Tech & J K White
65.	Floor hardener	Ironite, Perma, STP Ltd., Ferrok & Hardonate
66.	Modular Expansion Joint	Herculus, Sanfield India Ltd & Vexcolt
67.	Glass Wool	Dow Corning, UP Twiga & Isover
68.	uPVC door/window/ventilator	Fenesta, Komerling, Rheau, Veka, Duroplast, Aluplast & Advika Profiles Pvt. Ltd. (Fabrication and installation will be done by profile
69.	uPVC doors and win-dow hardware	Manufacturer or his authorized fabricator). Roto, Dorset, DNV Accado & Kinlong
70.	AAC block Adhesive	Liltra Tach Darma Arday Endura & Farrage
	70 to block / tariesive	UltraTech, Perma, Ardex Endura & Ferrous Crete
71.	PVC Water Tank	·
71. 72.		Crete
	PVC Water Tank	Crete Syntex & Vectus  MAX Blocks, UltraTech, HIL & BILTECH ACE & Gravit  Everyday/Hettich/Steel Art Brand Baskets of AISI 304(18/8); Hettich/Hafele Brand Auto closing, Concealed Hinges; DMS/ Dynasty/Indoline brand shutter
72.	PVC Water Tank AAC Block	Crete Syntex & Vectus  MAX Blocks, UltraTech, HIL & BILTECH ACE & Gravit  Everyday/Hettich/Steel Art Brand Baskets of AISI 304(18/8); Hettich/Hafele Brand Auto closing, Concealed Hinges; DMS/ Dynasty/
72. 73.	PVC Water Tank AAC Block Modular Kitchen	Crete Syntex & Vectus  MAX Blocks, UltraTech, HIL & BILTECH ACE & Gravit  Everyday/Hettich/Steel Art Brand Baskets of AISI 304(18/8); Hettich/Hafele Brand Auto closing, Concealed Hinges; DMS/ Dynasty/Indoline brand shutter  Knest, S-form, Durand Forms (India) Pvt. Ltd.

## 9.0 Testing Charges

## केन्द्रीय लोक निर्माण विमाग कार्यालय ज्ञापन No. DG/MAN/410

## ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

DATED: 22.10.2021

Subject: Addition of new Para 4.10.2 in CPWD Works Manual 2019 regarding testing charges to be borne by contractor.

It has been noticed that following provisions are sometimes being made in the NITs / Agreements by the NIT approving authorities:

"The cost of test shall be borne by contractor/ department in the manner as below:

- By the contractor, if the result shows that material does not conform to the relevant codes/ specification.
- By the department, if the results show that the material conforms to relevant codes/ specification."

It has been decided by the competent authority that testing charges shall be borne by the contractor in all cases. Accordingly following new para is added in CPWD Works Manual -2019.

Existing Provision	Modified Provision
4.10 Preparation of NIT	4.10 Preparation of NIT
4.10.2 No Provision	4.10.2 Testing charges to be borne by contractor
	Following provision shall be incorporated by the NIT approving authority in the NIT:
	All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor. The NIT shall have list of approved laboratories for testing as approved by ADG / SDG.

This issues with the approval of competent authority.

अधीक्षण अभियंता(सी.एंड एम.)

Issued from file No. CSQ/CM/16(1)/2021 e-file 9116587 प्रतिलिपिः सभी केलोनियि तथा लोनिवि दिल्ली के अधिकारियों को आवश्यक सूचना एव कार्यवाही हेत्।(केलोनिवि वेबसाईट के माध्यम से).

Figure 1: Modified provisions in CPWD works manual 2019 regarding testing charges to be borne by contractor.

# **Bill of Quantity**

Name of Work: Renovation and extension of High-pressure jet facility at back side of SL-109.

Estimate ID: EV SL 109 Nitrogen plant

SLNo	Estimate ID : EV SL 109 Nitrogen plant  Description	Qty	Unit	Rate	Amount
1	EARTH WORK	Qty	Oilit	nate	Amount
1.1	Earth work in excavation by mechanical means (Hydraulic excavator)	l			
	/ manual means in foundation trenches or drains (not exceeding 1.5	l			
	m in width or 10 sqm on plan), including dressing of sides and				
	ramming of bottoms, for all lift, including getting out the excavated				
	soil and disposal of surplus excavated soil as directed, within a lead of 50 m				
1.1.1	All kinds of soil.	16	cum	260.30	4165.00
1.2	Filling available excavated earth (excluding rock) in trenches, plinth,				120101
	sides of foundations etc. in layers not exceeding 20cm in depth,				
	consolidating each deposited layer by ramming and watering, lead				
	up to 50 and for all lif.	16	cum	196.00	3136.00
	Sub-Total				7301.00
2	CEMENT CONCRETE (CAST IN SITU)				
2.1	Providing and laying in position cement concrete of specified				
	grade excluding the cost of centering and shuttering - All work up to				
	plinth level :				
2.1.1	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural				
	sources: 8 graded stone aggregate 40 mm nominal size derived from				
	natural sources)	5.5	cum	6812.00	37466.00
2.2	Providing and laying damp-proof course 40 mm thick with cement	I			
	concrete 1:2:4 (1 cement: 2 coarse sand (zone-III) derived from	I			
	natural sources : 4 graded stone aggregate 12.5 mm nominal size			440.05	4642.00
	derived from natural sources)	4	sqm	410.85	1643.00
2.3	Providing & applying a coat of residual petroleum bitumen of grade				
	of VG-10 of approved quality using 1.7 kg per square metre on damp				
	proof course after cleaning the surface with brushes and finally with				
	a piece of cloth lightly soaked in kerosene oil.	4	sqm	146.15	585.00
2.4	Making plinth protection 50 mm thick of cement concrete 1:3:6		34111	140.13	303.00
2.4	(1 cement : 3 coarse sand (zone-III) derived from natural sources : 6	I			
	graded stone aggregate 20 mm nominal size derived from natural				
	sources) over 75 mm thick bed of dry brick ballast 40 mm nominal				
	size, well rammed and consolidated and grouted with fine sand,				
	including necessary excavation, levelling & dressing & finishing the				
	ton smooth	10	sqm	749.30	7493.00
	Sub-Total				47187.00
3	REINFORCED CEMENT CONCRETE				
3.1	Reinforced cement concrete work in beams, suspended floors, roofs				
	having slope up to 15 degree landings, balconies, shelves, chajjas,				
	lintels, bands, plain window sills, staircases and spiral stair cases				
	above plinth level up to floor five level, excluding the cost of				
	centering, shuttering, finishing and reinforcement with 1:1.5:3 (1	1			
	cement : 1.5 coarse sand (zone-III) derived from natural sources : 3				
	graded stone aggregate 20 mm nominal size derived from natural				
	sources).				
		2	cum	11505.50	23011.00
3.2	Centering and shuttering including strutting, propping etc. and				
2 2 1	removal of form for	<del>                                     </del>			
3.2.1	Lintels, beams, plinth beams, girders, bressumers and cantilevers	14	sqm	736.40	10310.00
3.3	Steel reinforcement for R.C.C. work including straightening,	1	3411	7 30.40	10010.00
	cutting, bending, placing in position and binding all complete above				
	plinth level.				
3.3.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.				
		150	kg	107.85	16178.00
	Sub-Total				49499.00
	•		•		

4	MASONRY WORK			Ι	
4.1	Brick work with common burnt clay F.P.S. (non modular) bricks of				
	class designation 7.5 in foundation and plinth in:				
4.1.1	Cement mortar 1:6(1 cement :6 coarse sand)	6	cum	7132.25	42794.00
4.2	Brick work with common burnt clay modular bricks of class				
	designation 7.5 in exposed brick work including making horizontal				
	and vertical grooves 10 mm wide 12 mm deep complete in cement				
4.2.1	mortar 1:6 (1 cement : 6 coarse sand).  Above plinth level upto floor V level	12	cum	8312.90	99755.00
4.3	Brick edging 7cm wide 11.4 cm deep to plinth protection with		Cuiti	6312.90	99755.00
4.3	common burnt clay F.P.S. (non modular) bricks of class designation				
	7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine				
	Isand).	17	metre	60.85	1034.00
	Sub-Total Sub-Total				143583.00
5	CLADDING WORK				
5.1	Providing and fixing 18 mm thick gang saw cut, mirror polished,				
	premoulded and prepolished, machine cut for kitchen platforms,				
	vanity counters, window sills, facias and similar locations of				
	required size, approved shade, colour and texture laid over 20 mm				
	thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints				
	treated with white cement, mixed with matching pigment, epoxy				
	touch ups, including rubbing, curing, moulding and polishing of edges				
	to give high gloss finish etc. complete at all levels.				
5.1.1	Granite stone slab of colour black, Cherry/Ruby red				
5.1.1.1	Area of slab over 0.50 sqm	2	sqm	5136.30	10273.00
5.2	Providing edge moulding to 18 mm thick marble stone counters,				
	Vanities etc., including machine polishing to edge to give high gloss				
	finish etc. complete as per design approved by Engineer-in-Charge.				
5.2.1	Granite work	3	metre	510.95	1533.00
5.3	Extra for providing opening of required size & shape for wash basin/				
	kitchen sink in kitchen platform, vanity counter and similar location				
	in marble/ Granite/ stone work, including necessary holes for pillar				
	taps etc. including moulding, rubbing and polishing of cut edges etc.	1	each	978.70	979.00
5.4	Providing and fixing 1st 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.	10	sqm	1267.95	12680.00
	Sub-Total				25465.00
6	WOOD AND P. V. C. WORK				_5.55.50
6.1	Providing and fixing ISI marked flush door shutters conforming to IS:				
	2202 (Part I) non-decorative type, core of block board				
	construction with frame of 1st class hard wood and well matched				
	commercial 3 ply veneering with vertical grains or cross bands and				
	face veneers on both faces of shutters:				
6.1.1	35 mm thick including ISI marked Stainless Steel butt hinges with	5	sqm	2392.65	11963.00
6.2	necessary screws Providing and fixing ISI marked oxidised M.S. sliding door bolts with		34111	2332.03	11303.00
2	nuts and screws etc. complete (Copper oxidised as per IS 1378)				
	The state of the complete (copper oxidised as per is 1970)				
6.2.1	300x16 mm	2	each	216.55	433.00
6.3	Providing and fixing ISI marked oxidised M.S. handles conforming to				
	IS:4992 with necessary screws etc. complete (Copper oxidised as per				
	IS 1378)				
6.3.1	125 mm	4	each	39.95	160.00

6.4	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm),				
	with necessary accessories and screws etc. complete.	2	each	1124.85	2250.00
6.5	Providing and fixing aluminium sliding door 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 nuts and		cacii	1124.03	2230.00
6.5.1	screws etc. complete : 300x16 mm	4	each	303.25	1213.00
6.6	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 :				
6.6.1	250x10 mm	4	each	115.15	461.00
6.7	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:				
6.7.1	125 mm	4	each	66.25	265.00
6.8	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
6.8.1	Twin rubber stopper	2	each	72.35	145.00
	Sub-Total				16890.00
7	STEEL WORK				
7.1	Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
7.1.1	Using M.S. angels 40x40x6 mm for diagonal braces	5	sqm	5804.35	29022.00
7.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
7.2.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1735	kg	172.60	299461.00
7.3	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer-in-charge.				
7.3.1	10 x 120 mm	96	each	170.95	16411.00
	Sub-Total Sub-Total				344894.00
8	FLOORING				
8.1	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.				
8.1.1	40 mm thick with 20 mm nominal size stone aggregate	43	sqm	614.20	26411.00
8.2	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement: 3 coarse sand), finished with a floating coat of neat cement.				
8.2.1	18 mm thick	2	sqm	662.05	1324.00
8.3	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
8.3.1	40 mm wide and 4 mm thick	28	metre	91.75	2569.00

8.4	Providing and laying vitrified floor tiles in diferent sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours				
	and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm				
	including grouting the joints with white cement and matching pigments etc., complete.				
8.4.1	Size of Tile 600x600 mm	17	sqm	1553.45	26409.00
8.5	Providing and laying Vitrified tiles in diferent sizes (thickness to				
	be specified by manufacturer), with water absorption less than 0.08				
	% and conforming to I.S. 15622, of approved make, in all colours &				
	shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement				
	slurry @ 3.3 kg/ sqm including grouting the joint with white cement				
	& matching pigments etc. complete.				
8.5.1	Size of Tile 600x600 mm	2	sqm	1623.05	3246.00
	Sub-Total		-		59959.00
9	ROOFING				
9.1	Providing fixing thermal insulation of ceiling (under deck insulation)				
	with Resin Bonded Fibre glass wool conforming to IS: 8183, density 24kg / m3, 50 mm thick, wrapped in 200 G Virgin Polythene bags,				
	fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire				
	mesh of 12.5 mm x 24 gauge wire mesh, for top most ceiling of				
9.2	huilding Providing and fixing on wall face unplasticised Rigid PVC rain water	92	sqm	703.05	64681.00
9.2	pipes conforming to IS: 13592 Type A, including jointing with seal				
	ring conforming to IS : 5382, leaving 10 mm gap for thermal				
	expansion. (i) Single socketed pipes.				
9.2.1 9.3	110 mm diameter  Providing and fixing on wall face unplasticised - PVC moulded	16	metre	377.40	6038.00
3.3	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.				
9.3.1	Bend 87.5°				
9.3.1.1	110 mm bend	4	each	150.35	601.00
9.3.2	Shoe (Plain)				
	110 mm Shoe	4	each	131.85	527.00
9.4	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.				
9.4.1	110 mm	6	each	371.30	2228.00
9.5	Providing and fixing precoated galvanised iron profile sheets (size,				
	shape and pitch of corrugation as approved by Engineer-in-Charge)				
	of total coated thickness 0.50 mm (base metal of minimum 0.45 mm				
	thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7				
	microns epoxy primer on both side of the sheet and polyester top				
	coat 15-18 microns. Sheet should have protective guard film of 25				
	microns minimum to avoid scratches during transportation and				
	should be supplied in single length upto 12 metre or as desired by				
	Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto				
	any pitch in horizontal/ vertical or curved surfaces, excluding the cost				
	of purlins, rafters and trusses and including cutting to size and shape				
					ı
	wherever required.	92	sqm	738.65	67956.00

0.6	Draviding and fiving proceeded galvaniced steel shoot reafing			П	
9.6	Providing and fixing precoated galvanised steel sheet roofing				
	accessories of total coated thickness 0.50 mm (base metal of				
	minimum 0.45 mm thickness with total coating thickness of 0.05				
	mm) with Zinc coating 120 gram per sqm as per IS: 277, in 240 mpa				
	steel grade, 5-7 microns epoxy primer on both side of the sheet and				
	polyester top coat 15-18 microns using self drilling/ self tapping				
9.6.1	Flashings/ Aprons.( Upto 600 mm)	29	metre	485.60	14082.00
9.6.2	Gutter (600 mm over all girth)	11	metre	1313.70	14451.00
9.7	Providing and fixing tiled false ceiling of specified materials of				
	size 595x595 mm in true horizontal level, suspended on inter locking				
	metal grid of hot dipped galvanized steel sections (galvanized @ 120				
	grams/ sqm, both side inclusive) consisting of main "T" runner with				
	suitably spaced joints to get required length and of size 24x38 mm				
	made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm				
	center to center and cross "T" of size 24x25 mm made of 0.30 mm				
	thick (minimum) sheet, 1200 mm long spaced between main "T" at				
	600 mm center to center to form a grid of 1200x600 mm and				
	secondary cross "T" of length 600 mm and size 24x25 mm made of				
	0.30 mm thick (minimum) sheet to be interlocked at middle of the				
	1200x600 mm panel to form grids of 600x600 mm and wall angle of				
	size 24x24x0.3 mm and laying false ceiling tiles of approved texture				
	in the grid including, required cutting/making, opening for services				
	like difusers, grills, light fittings, fixtures, smoke detectors etc. Main				
	"T" runners to be suspended from ceiling using GI slotted cleats of				
	size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50				
	mm long dash fasteners, 4 mm Gl adjustable rods with galvanised				
	-				
	butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm				
	center to center along main T, bottom exposed width of 24 mm of all				
	T-sections shall be pre-painted with polyester paint, all complete for				
	all heights as per specifications, drawings and as directed by Engineer				
	in-charge.				
0.7.4	13.5 and thick are a dec DVC leaving to de Company Tills of size				
9.7.1	12.5 mm thick square edge PVC Laminated Gypsum Tile of size				
	595x595 mm, made of Gypsum plasterboard, manufactured from				
	natural gypsum as per IS 2095 part I and laminated with white 0.16				
	mm thick fire retardant PVC film on the face side and 12 micron				
	metalized polyester on the back side with all edges sealed with the				
	face side PVC film which goes around and wraps the edges and is				
	bonded to the edges and the back side metalized polyester film so as				
	to make the tile a completely sealed unit.	60	sqm	2215.15	132909.00
	Sub-Total Sub-Total		-		303473.00
10	FINISHING				
	15 mm cement plaster on rough side of single or half brick wall of				
10.1				1	
	mix:	75	cam	205.25	20651.00
10.1.1	mix: 1:6(1 cement: 6 coarse sand)	75	sqm	395.35	29651.00
	mix: 1:6(1 cement: 6 coarse sand) Pointing on brick work or brick flooring with cement mortar 1:3 (1	75	sqm	395.35	29651.00
10.1.1	mix: 1:6(1 cement: 6 coarse sand)	75 50	sqm	395.35 257.35	29651.00 12868.00
10.1.1 10.2	mix: 1:6(1 cement: 6 coarse sand) Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):		·		
10.1.1 10.2 10.2.1	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing		·		
10.1.1 10.2 10.2.1	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing  Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and		·		
10.1.1 10.2 10.2.1	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing  Distempering with 1st quality acrylic distemper (ready mixed) having		·		
10.1.1 10.2 10.2.1	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing  Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and		·		
10.1.1 10.2 10.2.1 10.3	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing  Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour:		·		12868.00
10.1.1 10.2 10.2.1 10.3	mix:  1:6(1 cement: 6 coarse sand)  Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand):  Flush / Ruled/ Struck or weathered pointing  Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour:  New work (two or more coats) over and including water		·		

10.5 P 10.5.1 T w 10.6 P th p 10.7.1 C c S 11 R	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and ncluding priming coat of exterior primer applied @ 0.90 litre/10 sqm)  Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:  Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture  Providing and applying white cement based putty of average chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.  Finishing walls with Acrylic Smooth exterior paint of required shade:	45	sqm	160.60 226.25	9636.00
10.5 P m 10.5.1 T w 10.6 P tt p co 10.7.1 C co 5 S 11 R	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:  Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture  Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	45	·		
10.5 P m 10.5.1 T w 10.6 P tt p 10.7 F 10.7.1 C c c c S 11 R	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:  Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture  Providing and applying white cement based putty of average chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		sqm	226.25	4040.
10.5.1 T w  10.6 P tt p 10.7 F  10.7.1 C c S 11 R	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture  Providing and applying white cement based putty of average chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		sqm	226.25	4046: 5-
10.6 P tt p c 10.7 F 10.7.1 C c S 111 R	Providing and applying white cement based putty of average chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		sqm	226.25	4040
10.6 Ptl p Cd 10.7 F 10.7.1 Cd Cd S 11 R	Providing and applying white cement based putty of average chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		sqm	226.25	4040: 5-
ttl pp cc 10.7.1 C cc S 111 R	chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		sqm	226.25	
ttl pp cc 10.7.1 C cc S 111 R	chickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	210			10181.00
p c. c. c. c. c. c. s.	plastered wall surface to prepare the surface even and smooth complete.	210			
10.7 F 10.7.1 C cc S 11 R	complete.	210			
10.7 F 10.7.1 O co S 11 R	Finishing walls with Acrylic Smooth exterior paint of required shade:		sqm	156.05	32771.00
20 S 11 R			•		
20 S 11 R	Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing				
S 11 R	cement paint surface	130	sqm	120.75	15698.00
	Sub-Total				149792.00
	REPAIRS TO BUILDING				
11.1 P	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.				
I .	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				
d	duration as approved and removing it there after. The scaffolding				
I .	system shall be stiffened with bracings, runners, connection with the				
b	puilding etc wherever required for inspection of work at required				
lc	ocations with essential safety features for the workmen etc.				
C	complete as per directions and approval of Engineer-in-charge. The				
e	elevational area of the scaffolding shall be measured for payment				
р	ourpose. The payment will be made once irrespective of duration of				
S	scaffolding. Note: - This item to be used for maintenance work				
I -	udicially, necessary deduction for scaffolding in the existing item to				
b	pe done.				
		15	sqm	338.25	5074.00
	Sub-Total				5074.00
12 D	Dismantling and Demolishing				
12.1 D	Demolishing brick work manually/ by mechanical means				
ir	ncluding stacking of serviceable material and disposal of				
u	unserviceable material within 50 metres lead as per direction of				
	Ingineer-in-charge.				
	n cement mortar	4	cum	2060.20	8241.00
I .	Dismantling steel work in built up sections in angles, tees, flats and				
I .	channels including all gusset plates, bolts, nuts, cutting rivets,				
I .	welding etc. including dismembering and stacking within 50 metres	100	kg	5.65	565.00
	ead. Dismantling roofing including ridges, hips, valleys and gutters etc.,	100	- ''6	3.03	303.00
	and stacking the material within 50 metres lead of:				
	and stacking the material within 50 meters read on				
	G.S. Sheet	82	sqm	164.95	13526.00
	Disposal of building rubbish / malba / similar unserviceable,				
	dismantled or waste materials by mechanical means, including				
	oading, transporting, unloading to approved municipal dumping				
	ground or as approved by Engineer-in-charge, beyond 50 m initial				
le	ead, for all leads including all lifts involved.	4	cum	263.95	1056.00
	Sub-Total Sub-Total		Cuiii	203.55	23388.00
	SANITARY INSTALLATIONS				23300.00
				+	
13 1 10	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:				
	making an connections excluding cost of fittiligs.				

P.V.C. waste fittings complete.  13.2.1. 132 m dia  13.2.1. 132 m dia  14 WATER SUPPLY  14.1 Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the walls.  14.1.1 15 mm nominal bore  15 metre  16.2.1 20 mm dia nominal bore  16.3.2 0 metre  17.2 1.2 20 mm dia nominal bore  17.3 1.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  15 metre  16.5 1 metre  17.5 1 metre  17.5 1 metre  18.5 1 metre  19.5 1 metre  10 metr	13.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including				
13.2.1. 32 mm dia 13.2.1. 32 mm dia 14. WATER SUPPLY 14.1 Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the walls 14.1.1 15 mm dia nominal bore 15. metre 580.45 2902. 14.1.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 14.2.1 50 mm dia nominal bore 15. on more in a nominal bore 16. dividing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 17. on more in a nominal bore 18. on more in a nominal bore 19. on more in a nominal bore 19. on more in a nominal bore 10. on metre 762.15 7622. 18. on more in a nominal bore 10. on metre 762.15 7622. 18. on more in a nominal bore 11. each 911.90 912. 18. on more in a nominal bore 12. on more in a nominal bore 13. on more in a nominal bore 14. on more in a nominal bore 15. on more in a nominal bore 16. on more in a nominal bore 17. on the interval in a nominal bore 18. on the interval in a nominal bore 19. on the interval in a nominal bore 19. on the interval in a nominal bore 10. on more in a nominal bore 11. on the interval in a nominal bore 12. on the interval in a nominal bore 13. on the interval in a nominal bore 14. on the interval in a nominal bore 15. on length 16. on the interval in a nominal bore 16. on the interval in a nominal bore 17. on the interval in a nominal bore 18. on length 19. on the interval in a nominal bore 19. on t		I				
13.2.1.\$ 32 mm dia 1 each 119.55 120.  Sub-Total 4198.  14 WATER SUPPLY 14.1 Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall:  14.1.1 15 mm dia nominal bore 5 metre 580.45 2902.  14.2.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 14.2.1 5 mm dia nominal bore 20 metre 635.20 12704.  14.2.1 50 mm dia nominal bore 10 metre 762.15 7622.  14.3.1 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 1 each 911.90 912.  14.3.1 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 1 each 911.90 912.  14.4.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 1 each 911.90 912.  14.4.5 Providing and fixing uplasticised PVC connection pipe with brass unions: 1 each 539.95 540.  14.5.1 15 mm nominal bore 1 each 97.75 98.  14.5.1 15 mm nominal bore 1 each 318.35 318.  14.5.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 cover with frame of 300 x 300 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 new standard design: 15.1. 100.00 mm size P type						
Sub-Total   4198.			1	each	119.55	120.00
14. WATER SUPPLY 14.1 Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall: 14.1.1 Is mm nominal bore 14.2.2 0 mm dia nominal bore 14.2.2 0 mm dia nominal bore 14.2.3 50 mm dia nominal bore 14.2.1 50 mm dia nominal bore 14.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 14.3.1 25 to 40 mm nominal bore 14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 14.4.1 20 mm nominal bore 1 each 539.95 540. 14.5 Providing and fixing uplasticised PVC connection pipe with brass unions: 14.5.1 15 mm nominal bore 1 each 97.75 98. 14.5.1 15 mm nominal bore 1 each 318.35 318. 14.6.1 15 mm nominal bore 1 each 346.80 347. 14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS standards and weighing not less than 690 gms. 14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS.8931 14.8.1 15 mm nominal bore 1 each 574.30 574. 26816. 26816. 26816. 279. 380. Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. cover with frame of 300 x 300 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 care standard design:		Sub-Total				4198.00
14.1 Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall:  14.1.1 15 mm dia nominal bore 5 metre 580.45 2902.  14.1.2 20 mm dia nominal bore 20 metre 635.20 12704.  14.2.1 50 mm dia nominal bore 10 metre 635.20 12704.  14.2.1 50 mm dia nominal bore 10 metre 762.15 7622.  14.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore 1 each 911.90 912.  14.4.1 20 mm nominal bore 1 each 911.90 912.  14.4.2 20 mm nominal bore 1 each 539.95 540.  14.5.1 45 cm length 1 each 97.75 98.  14.5.1 45 cm length 1 each 97.75 98.  14.6. Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) in each 97.75 98.  14.6.1 15 mm nominal bore 1 each 318.35 318.  14.7.1 Froviding and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS.8931 1.  14.8.1 The mn nominal bore 1 each 574.30 574.  Sub-Total 26816.  DRAINAGE 15.1 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 x 300 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 the standard design.						1250.00
including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall:  14.1.1 15 mm dia nominal bore  14.2.2 00 mm dia nominal bore  14.2.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work  14.2.1 50 mm dia nominal bore  14.3.1 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  14.4.1 20 mm nominal bore  14.4.1 20 mm nominal bore  14.4.1 20 mm nominal bore  14.5.1 45 cm length  14.5.1 15 mm nominal bore  14.5.1.1 15 mm nominal bore  15.1 20 mm nominal bore  16.1 15 mm nominal bore  17. each  18.5.2 20 mm nominal bore  18.5.3 31.8 31.8 31.8 31.8 31.8 31.8 31.8 31		Providing and fixing G.I. Pipes complete with G.I. fittings and clamps.				
painting with anti corrosive bitumastic paint, cutting chases and making good the wall:  14.1.1 15 mm nominal bore  5 metre 580.45 2902.  14.1.2 20 mm dia nominal bore  70 metre 635.20 12704.  14.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refiling etc. External work  14.2.1 50 mm dia nominal bore  10 metre 762.15 7622.  14.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  14.4.1 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore  1 each 14.5 Providing and fixing uplasticised PVC connection pipe with brass quinons:  14.5.1 15 mm nominal bore  1 each 14.5.1.1 15 mm nominal bore  1 each 14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)  14.6.1 15 mm nominal bore  1 each 14.7.1 15 mm nominal bore 1 each 14.8 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each						
making good the wall:   15 mm dia nominal bore   20 metre   580.45   2902.						
14.1.2 20 mm dia nominal bore 20 metre 635.20 12704.  14.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 14.2.1 50 mm dia nominal bore 10 metre 762.15 7622.  14.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 1 each 911.90 912.  14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 1 each 539.95 540.  14.5 Providing and fixing uplasticised PVC connection pipe with brass unions: 1 each 97.75 98.  14.5.1 25 cm length 1 each 97.75 98.  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work): 1 each 346.80 347.  14.6.1 15 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 798.95 799.  14.8.2 Is mm nominal bore 1 each 798.95 799.  14.8.3 Is mm nominal bore 1 each 798.95 799.  14.8.1 Is mm nominal bore 1 each 798.95 799.  14.8.2 Is mm nominal bore 1 each 798.95 799.  14.8.3 Is mm nominal bore 1 each 798.95 799.  14.8.4 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS.8931 1.  14.8.1 Is mm nominal bore 1 each 778.30 574.  Sub-Total 26816.  15.1 DRAINAGE 15.1. Is more of 300 x 300 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 aner standard design: 15.1. I 100x100 mm size P type		making good the wall :				
14.2. Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work  14.2.1 50 mm dia nominal bore  14.3.1 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  14.4.1 20 mm nominal bore  14.4.1 20 mm nominal bore  14.5.1 45 cm length  14.5.1 25 mm nominal bore  1 each  14.5.1 20 mm nominal bore  1 each	14.1.1	15 mm dia nominal bore	5	metre	580.45	2902.00
trenching and refilling etc. External work  14.2.1 50 mm dia nominal bore  14.3 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  1 each 911.90 912.  14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore  1 each 539.95 540.  14.5.1 25 mm nominal bore  1 each 97.75 98.  14.6 Providing and fixing uplasticised PVC connection pipe with brass unions:  14.6.1 15 mm nominal bore  1 each 97.75 98.  14.6.2 20 mm nominal bore  1 each 318.35 318.  14.6.3 15 mm nominal bore  1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8.1 15 mm nominal bore  1 each 798.95 799.  14.8.1 15 mm nominal bore  1 each 798.95 799.  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  1 DRAINAGE  1 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 x 300 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 ner standard design:  15.1.1 100x100 mm size P type	14.1.2	20 mm dia nominal bore	20	metre	635.20	12704.00
14.2.1 50 mm dia nominal bore 14.3.1 Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 14.3.1 25 to 40 mm nominal bore 1 each 911.90 912. 14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 14.4.1 20 mm nominal bore 1 each 539.95 540. 14.5 Providing and fixing uplasticised PVC connection pipe with brass unions: 14.5.1 45 cm length 14.5.1.1 51 mm nominal bore 1 each 97.75 98. 14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work): 14.6.1 15 mm nominal bore 1 each 318.35 318. 14.6.2 20 mm nominal bore 1 each 346.80 347. 14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 14.7.1 15 mm nominal bore 1 each 798.95 799. 14.8.1 15 mm nominal bore 1 each 798.95 799. 14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 DRAINAGE 15.1 DRAINAGE 15.1 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 x 300 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 ner standard design: 15.1.1 100x100 mm size P type	14.2	Providing and fixing G.I. pipes complete with G.I. fittings including				
14.3. Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore 1 each 911.90 912.  14.4. Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore 1 each 539.95 540.  14.5. Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 cm length 1 each 97.75 98.  14.6.1 15 mm nominal bore 1 each 97.75 98.  14.6.2 20 mm nominal bore 1 each 318.35 318.  14.6.3 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15.1 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type						
following sizes by providing and fixing tee, including cutting and threading the pipe etc. Complete:  14.3.1 25 to 40 mm nominal bore			10	metre	762.15	7622.00
threading the pipe etc. complete:  14.3.1 25 to 40 mm nominal bore  14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore  1 each 539.95 540.  14.5 Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 ml ength  14.5.1.1 15 mm nominal bore  1 each 97.75 98.  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore  1 each 318.35 318.  14.6.2 20 mm nominal bore  1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  5 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type		_				
14.3.1 25 to 40 mm nominal bore 1 each 911.90 912.  14.4.1 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore 1 each 539.95 540.  14.5.1 45 cm length 1.5.1. 15 mm nominal bore 1 each 97.75 98.  14.5.1 15 mm nominal bore 1 each 97.75 98.  14.6.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS.8931 14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 DRAINAGE 15.1 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 x 300 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:  15.1.1 100x100 mm size P type						
14.4 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):  14.4.1 20 mm nominal bore  14.5.1 Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 cm length  14.5.1.15 mm nominal bore  1 each 97.75 98.  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore  1 each 318.35 318.  14.6.2 20 mm nominal bore  1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  26816.  DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	1121		_		244.00	010.00
quality (screwed end):  14.4.1 20 mm nominal bore  1 each 539.95 540.  14.5.1 Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 cm length  14.5.1.1 15 mm nominal bore  1 each 97.75 98.  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore  1 each 318.35 318.  14.6.2 20 mm nominal bore  1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  1 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 x 300 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 ner standard design:  15.1.1 100x100 mm size P type			1	eacn	911.90	912.00
14.4.1 20 mm nominal bore 1 each 539.95 540.  14.5.1 Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 cm length  14.5.1.1 15 mm nominal bore 1 each 97.75 98.  14.6.1 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.4					
14.5. Providing and fixing uplasticised PVC connection pipe with brass unions:  14.5.1 45 cm length  14.5.1.15 mm nominal bore  14.6. Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore  1 each 318.35 318.  14.6.2 20 mm nominal bore  1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  1 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 x 300 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:  15.1.1 100x100 mm size P type	14 4 1		1	each	520.05	540.00
unions:  14.5.1 45 cm length  14.5.1.1 15 mm nominal bore  1 each 97.75 98.  14.6 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):  14.6.1 15 mm nominal bore  1 each 318.35 318.  14.6.2 20 mm nominal bore  1 each 346.80 347.  Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore  1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore  1 each 574.30 574.  Sub-Total  1 Each 574.30 574.  Sub-Total  1 Conver with frame of 300 x 300 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:  15.1.1 100x100 mm size P type			1	Cacii	339.93	340.00
14.5.1       45 cm length       1       each       97.75       98.         14.6       Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :       1       each       318.35       318.         14.6.1       15 mm nominal bore       1       each       346.80       347.         14.7.7       Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.       1       each       798.95       799.         14.7.1       15 mm nominal bore       1       each       798.95       799.         14.8       Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931       1       each       574.30       574.         Sub-Total       1       each       574.30       574. </td <td>14.5</td> <td></td> <td></td> <td></td> <td></td> <td></td>	14.5					
14.5.1.1 15 mm nominal bore 14.6.1 Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)  14.6.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.5.1					
14.6. Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)  14.6.1 15 mm nominal bore		-	1	each	97 75	98.00
threading the pipe and making long screws etc. complete (New work)  14.6.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type				Cacii	37.73	38.00
14.6.1 15 mm nominal bore 1 each 318.35 318.  14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.0	l				
14.6.2 20 mm nominal bore 1 each 346.80 347.  14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type		:				
14.7 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore	14.6.1	15 mm nominal bore	1	each	318.35	318.00
conforming to IS standards and weighing not less than 690 gms.  14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.6.2	20 mm nominal bore	1	each	346.80	347.00
14.7.1 15 mm nominal bore 1 each 798.95 799.  14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.7	Providing and fixing C.P. brass long body bib cock of approved quality				
14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type		conforming to IS standards and weighing not less than 690 gms.				
14.8 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type						
points of approved quality conforming to IS:8931  14.8.1 15 mm nominal bore 1 each 574.30 574.  Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	14.7.1		1	each	798.95	799.00
1 each 574.30 574.  Sub-Total 26816.  DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type	_					
Sub-Total 26816.  15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type						
15 DRAINAGE  15.1 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 x 300 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:  15.1.1 100x100 mm size P type			1	each	574.30	574.00
15.1 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 x 300 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:  15.1.1 100x100 mm size P type		Sub-Total				26816.00
complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x 300 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:  15.1.1 100x100 mm size P type						
C.I. cover with frame of 300 x 300 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:  15.1.1 100x100 mm size P type	15.1					
cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 15.1.1 100x100 mm size P type						
kg as per standard design: 15.1.1 100x100 mm size P type						
15.1.1   100x100 mm size P type		_				
	15 1 1					
13.1.1.4 With common bank clay 1.1.3. (non modular) bricks of class						
designation 7.5   1 each   2707.65   2708.	13.1.1.1		1	each	2707.65	2708.00
15.2 Making connection of drain or sewer line with existing manhole	15.2					
including breaking into and making good the walls, floors with						
cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded						
stone aggregate 20 mm nominal size) cement plastered on both		_				
sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished						
with a floating coat of neat cement and making necessary channels						
for the drain etc. complete:	45.2.1					
			1	each	810.45	810.00
						3518.00
16 ALUMINIUM WORK	16	ALUMINIUM WORK				

16.1	Providing and fixing aluminium work for doors, windows, ventilators				
	and partitions with extruded built up standard tubular sections/				
	appropriate Z sections and other sections of approved make				
	conforming to IS: 733 and IS: 1285, fixing with dash fasteners of				
	required dia and size, including necessary filling up the gaps at				
	junctions, i.e. at top, bottom and sides with required EPDM rubber/				
	neoprene gasket etc. Aluminium sections shall be smooth, rust free,				
	straight, mitred and jointed mechanically wherever required				
	including cleat angle, Aluminium snap beading for glazing / panelling,				
	C.P. brass / stainless steel screws, all complete as per architectural				
	drawings and the directions of Engineer-in-charge. (Glazing, paneling				
	and dash fasteners to be paid for separately):				
	and dash lasteners to be paid for separately,				
16.1.1	For fixed portion				
16.1.1.1	Anodised aluminium (anodised transparent or dyed to required				
	shade according to IS: 1868, Minimum anodic coating of grade AC				
	15)	42	kg	495.05	20792.00
16.2	Providing and fixing double glazed hermetically sealed glazing in				
	aluminium windows, ventilators and partition etc. with 6 mm thick				
	clear float glass both side, having 12 mm air gap, including providing				
	EPDM gasket, perforated aluminium spacers, desiccants, sealant				
	(Both primary and secondary sealant) etc. as per specifications,				
	drawings and direction of Engineer-in-charge complete.			4007.70	22222
	C. b. T-t-1	6	sqm	4997.70	29986.00
	Sub-Total				50778.00
17	NEW TECHNOLOGIES AND MATERIALS				
	Providing & Applying weather proof sealant on outer joints of				
	approved make confirming to IS & directed by Engineer-in-charge.				
17.1.1	Sealant 25 mm x10 mm at joints	20	metre	178.95	3579.00
	Sub-Total				3579.00
18	Minor Civil Maintance Works				
18.1	Providing & fixing Armstrong channelled woodwork G14/G28				
	perforated panels of width 128 mm, thickness of 15mm and length				
	2440 mm made of a high-density particle board substrate with a				
	laminated facing as per manufacturer's available shade option &				
	finish with a melamine balancing layer on the reverse side. The board				
	shall have a special perforation pattern where the visible surface has				
	a (Helmholtz fluted perforation of 2mm width and 14mm of visible				
	panel. The back if the perforated panel shall have a sound absorbing				
	nonwoven acoustic fleece. The panel shall be mounted on a special				
	aluminium spine using clip and requisite arrangement as per				
	manufacturer's specification and as per directions of the Engineer-in-				
	charge complete.				
	Charge complete.		Cam	F024 F0	F22242.00
18.2	Extra for providing Toughengin glass instead of float claar glass of	90	Sqm	5924.59	533213.00
	6mm thick	12	Sqm	607.00	7284.00
	Sub-Total				540497.00
	Total				1805891.00
	Modified Estimated Cost after using correction factor on DSR 2023				
1 1	on account of GST @ 0.973 * 1265394 = 1231228	I		1	1771725.00