

Name of work

Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur.

BID DOCUMENT



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

Indian Institute of Technology Kanpur

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

Name of work: Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur

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)

Sl. No.	Particulars	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 Complete	✓	
11.	Declaration about Site Inspection	✓	
12.	Letter of Transmittal	✓	
13.	CPWD - 7	✓	
14.	Tender certificate	✓	
15.	Tender Acceptance Letter	✓	
16.	Copy of Financial turnover from CA along with audited balance sheets certified from CA/bank UDIN No for current 3years.	✓	
17.	Solvency certificate CA/Bank ** or Net Worth certificate from certified chartered accountant	✓	
18.	Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs.)		
19.	Any other documents		

** Bank Solvency: Preferably of the Current Financial Year, but not older than one years

1. Notice Inviting e-Tenders

The Superintending 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: **47/Civil/D3/2025-26**

1	Name of work	:	Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur
2	Estimated cost (including GST)	:	Rs. 64,92,656/-
3	Earnest Money Deposit(Rs.)	:	Rs. 1,29,853/-
4	Duration of contract	:	Twelve (12) months
5	Last Time & date of submission of bids (Up to)	:	As per CPP portal data (https://eprocure.gov.in/eprocure/app)
6	Opening of bids	:	As per CPP portal data (https://eprocure.gov.in/eprocure/app)
7	Time allowed for submission 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 (<http://eprocure.gov.in/eprocure/app>). Aspiring bidders who have not enrolled / registered in e-procurement should enroll / register themselves before participating through web site <http://eprocure.gov.in/eprocure/app>. 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 view all 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 <http://eprocure.gov.in/eprocure/app> 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.

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

2. Information and Instructions for Bidders for E-Tendering

The Superintending 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.

1	Name of organization	:	Indian Institute of Technology, Kanpur
2	NIT No.	:	47/Civil/D3/2025-26
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 technicalbid
18	Earnest Money Deposit (EMD)	:	Rs. 1,29,853/-

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	:	seiwd@iitk.ac.in

The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only 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 www.eprocure.gov.in
3. But the bid can only be submitted after deposition of e processing fee and with 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 JPG format and 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. If claimed, The enlistment of the contractors 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: "**Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur**"
17. The work is estimated to cost **Rs. 64,92,656/-**. However, this estimate given is mere approximation for guide. **The works shall be carried out based on the requirement on a quantity take off sheet (QTO)/work order, approved by the Executive Engineer up to a maximum value of Rs. 1.30 Lacs at a time under normal circumstances and up to Rs. 2.50 Lacs at a time under exceptional cases.**
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 **Twelve (12)** months from the date of start as defined in Schedule "F" or from the first date of handing over of the site, whichever is 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 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 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 if:
 - (i) The bidder is found ineligible.
 - (ii) If the bidder does not deposit original EMD to the office of Executive Engineer, Div-III, 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 as indicated 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 extra charge 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., **Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur**) 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 contract is 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, IITK.
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 strictly in 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.

Payment & Schedule:

All running bills for each work and the final bill for the work shall be facilitated by Engineer-in-Charge. The bill must be submitted to the Office of Institute Works Department, IIT Kanpur. An approved quantity take off (QTO) sheet/Work order must be part of all bill submissions for clearance of these bills.

2.2 Instructions for Online BID Submission

This tender document has been published on the Central Public Procurement Portal (URL: <http://eprocure.gov.in/eprocure/app>). 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 <http://eprocure.gov.in/eprocure/app>

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](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 CPP 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

1. 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.

2.2.3 Preparation of bids

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the 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.
3. 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.
4. 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.

2.2.4 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.

2.2.5 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.

2.2.6 General instruction to bidders

1. The tenders will be received online through portal

<https://eprocure.gov.in/eprocure/app>. 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 <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the website <https://eprocure.gov.in/eprocure/app> 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 <https://eprocure.gov.in/eprocure/app>.

Superintending 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 sequence as 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 5.2
3. EPF & ESI Registration
4. Copy of PAN card
5. Affidavit for not being blacklisted/debarred/restrained as per 5.3
6. Performance report of works executed as per 5.4
7. Structure and Organization of the Agency as per 5.5
8. Declaration on Details of the Bidder(s) as per 5.6
9. Details of Similar Nature of Works Completed as per 5.7
10. Declaration about Site Inspection as per 5.8
11. Letter of Transmittal as per 5.9
12. CPWD-7 as per 5.10
13. Tender Certificate as per 5.11
14. Tender Acceptance Letter as per 5.12
15. Financial Information as per 5.13
16. Solvency certificate as per 5.14 (minimum 40% of estimated cost put to tender)
Or Net Worth Certificate from certified Chartered Accountant as per 5.15
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, IWD, IIT Kanpur before the Date & time of opening of technical bids as specified in the above 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 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 works of 60% value of the estimated cost put to tender Or
- iii) Three similar works 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 “**Renovation / Annual repairs & maintenance of 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 in last 7 years.

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 at IIT 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 or their 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 TheState 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 whichwork 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 forany action taken by IITK or GST department in this regard.

Signature of bidder

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

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 on works referred to in Financial Information

(To be printed in Company's Letterhead)

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

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.	Type of the firm / organization: Public Ltd, / Private Ltd./ 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 registration with the Govt. department		

16	Tendering limit as per the registration department		
17	Has the applicant ever been required to suspend any project for a period of more than six months continuously after Commencement of work?	:	If so, give the name of the project and reasons of suspension of project
18	Has the applicant ever been convicted by a court of law?	:	YES / NO, If yes give 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	Owners or sponsoring organization	Const of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending /in Progress with details*	Name and address / telephone number of officers to whom reference may be made	Whether the work was done on back to back basis Yes/ No
1	2	3	4	5	6	7	8	9	10

* 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 Superintending Engineer,
IWD, IIT,
Kanpur

Subject: Submission of Tender for the work of "Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur.

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 Superintending Engineer,
IWD, IIT, Kanpur- 208016

Name of Work: Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur

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:

Sl. 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 “Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur.

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 got executed 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

Dated:

Address

Occupation

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:

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 sub-contracting 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,

1. 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).
2. 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.
3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.
6. 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).

Financial Years	2020-21	2021-22	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 statement of the account during the financial year, the net worth of M/s./Sh.....(Name & Registered Address of individual/firm/company) as on 31.3.2025 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 31.3.2025.

.....
(Signature of the Chartered Accountant)

.....
(Name of the Chartered Accountant)

.....
(Membership No. of ICAI)

.....
(Date & Seal)

5.15 Proforma for Contract for Removal of Defects after Completion In Respect of Water Proofing Works

Contract for Removal of Defects after Completion In Respect of Water Proofing Works

(BASEMENT/LOWER GROUND FLOOR/UNDER GROUND TANK/ROOF)

The Agreement made this..... day of Two thousand Twenty Five and between.....

son of (hereinafter called the Guarantor of the one part) and the BOARD OF GOVERNORS (hereinafter called the Government of the other part).

WHEREAS THIS agreement is supplementary to a contract (hereinafter called the contract) dated and made between the GUARANTOR OF THE ONE part and the Government of the other part, whereby the contractor, inter alia, undertook to render the buildings and structures in the contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for 08 (eight) years from the date after the maintenance period prescribed in the contract.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- c) The decision of the Engineer-in -charge with regard to cause of leakage/seepage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water proof to the satisfaction of the Engineer-in-charge at his cost and shall commence the work

for the rectification within seven days from the date of issue of the notice from the Engineer- in-charge calling upon him to rectify the defects failing which the work shall be done by the department by some other agency contractor at the GUARANTOR's risk and cost. The decision of the Engineer-in-charge as to the cost payable by the Guarantor shall be final and binding.

That if guarantor fails to make good all defects or commits breach there under then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the Government the decision of the Engineer-in-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obliger.
... and by. and for and on behalf of the PRESIDENT OF INDIA on the
day, month and year first above written SIGNED, SEALED AND delivered by
OBLIGOR in the presence of :

1.
2.

SIGNED FOR AND ON BEHALF OF THE BOARD OF GOVERNORS BY in the
presence of:

1.
2.

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. No.	Description	Hire charges per day	Place of issue
1	2	3	4
-----NIL -----			

SCHEDULE "D"	Extra schedule for specific requirements/document for the work, if any:	As attached in tender form.
SCHEDULE "E"	Schedule of component of other Materials, Labour, POL etc. for price escalation	N. A.
SCHEDULE "F"	Reference to General Conditions of contract.	
Name of Work:	Annual contract for carrying out minor civil maintenance works in Academic Area Zone-4 at IIT Kanpur	
Estimated cost of the work:	Rs. 64,92,656/-	
Earnest money	Rs. 1,29,853/-	
Performance Guarantee	5% of the tendered value of the work	
Security Deposit	2.5% of the tendered value of the work	

General rules and direction:

	period as provided in i) above	
Clause 1A	Applicable. The Defect liability period shall be One year from the date of handing over of the assigned works to the user/Institute	
Clause 2	Authority for fixing Compensation under Clause 2	SE, IWD, IIT, Kanpur. Or successor thereof
Clause 2A	Whether Clause 2A shall be applicable	Yes
Clause 5	i) Number of days from the date of issue of issue of letter of acceptance for reckoning date of start ii) Time allowed for execution of work	22 days 12 Months
i)	Number of days from the date of issue of letter of acceptance for reckoning date of start	22 days
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	APPLICABLE
Clause 7		APPLICABLE
Clause 10A	Material to be provided by the contractor	APPLICABLE
Clause 10B (ii), (iii)	Whether clause 10-B (ii) and 10-B (iii) shall be applicable.	NOT APPLICABLE

Clause 10 C	Component of labour expressed as percentage of value of work	NOT APPLICABLE
Clause 10 CA		NOT APPLICABLE
Clause 10 CC	Increase/Decrease in Price of materials/wages	NOT APPLICABLE
Clause 11		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 works	100 %
Clause 16	Competent Authority for deciding reduced rates for Civil items of work	As per table 7
Clause 17	Defect liability period	One year and those listed in Special Conditions of Contract
Clause 18	List of mandatory machinery, tools & plants to be deployed by the contractor at site	As per the scope of work
Clause 32	Requirement of Technical Representative(s)	As per table 9
If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited.		
Table 6 Major milestones of the project		
The contractor should always keep his establishment ready to commence the work immediately after the issue of the work of any amount. Work requests of urgent nature		

should be included in works order at the earliest after receiving orders from the Engineer in charge. The time schedule for the issued works should be as per this Table

Sl. No.	Spending limit	Maximum lead time to start the work with an approved work orders	Maximum completion duration	Amount to be deducted in case of non-achievement of milestone (% of the cost of the work order, every week after completion of maximum duration)
1	Works costing up to Rs. 50,000.00	3 days	14 days	5
2.	Works costing up from Rs. 50,000.00 to Rs. 1,30,000.00	7 days	21 days	5
3	Works costing up from Rs. 1,30,000.00 TO Rs. 2,50,000.00	7 days	28 days	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 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	12 months
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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)

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

Table 9: Requirement of Technical staff as per Clause 32

Sl. No.	Qualification	Number	Minimum Experience in years	Designation	Rate at which the recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32
1.	Graduate / Diploma	1	5	Project / Planning / construction / billing Engineer (Civil)	Rs. 25000/- (Rupees Twenty Five Thousand only) per 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.

The details of appointed engineers/technical staffs have to be verified and approved by Engineer- in-charge

Clause 42 i)	a) Schedule/ statement for determining theoretical quantity of cement &	NIL
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	bitumen on the basis of Delhi Schedule of Rates 2023 printed by CPWD	
ii)	Variations permissible on theoretical quantities	NIL
a)	Cement for works with estimated cost put to tender not more than Rs. 5 lakhs. For works with estimated cost put to Tender is more than Rs. 5 lakhs	NIL
b)	Steel reinforcement and structural steel Sections for diameter, section and category.	NIL
c)	All other materials	NIL

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

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

7 Scope of work

7.1 Brief of the works

1. Carriage of Materials
2. Earth Work
3. Cement Concrete
4. REINFORCED CEMENT CONCRETE
5. Masonary
6. Cladding
7. Wood & PVC work
8. STEEL WORK
9. FLOORING
10. ROOFING
11. FINISHING
12. Repairs to building
13. Dismantling and Demolishing
14. ROAD WORK
15. SANITARY INSTALLATIONS
16. WATER SUPPLY
17. DRAINAGE
18. ALUMINIUM WORK
19. WATER PROOFING
20. NEW TECHNOLOGIES AND MATERIALS
21. Minor Civil Maintenance

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.

7.2 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.

7.3 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.

Sl. No.	Material description	Manufacturer / Brand Name
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.	Waterproofing 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 compound for bathroom/ toilet /balcony & other wet area	Fosroc: Bush Bond, STP Ltd.: Shalicrote, 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, Ar- dex 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 repellent / 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, Johnson, Somany or equivalent as per EIC
30.	Vitrified Tiles (Antiskid /Matt /Glazed)	Kajaria, Johnson, Somany or equivalent as per EIC
31.	Paver block & Kerbstone	Pavcon, Hyper, Mayur, KK, Power, Sharda & Navya
32.	Cement Based wallputty	Asian Paints, Birla Wall Care, JK, White
33.	Oil bound washable distemper / dry distemper	Asian Paints (Professional Acrylic Distemper), Nerolac: Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper& Dulux ICI: Maxilite

34.	1st quality acrylic distemper (washable/ready mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint), Berger: 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: Velvet 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 silicon 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 Oxide Zinc 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 (Normal 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 window hardware	Manufacturer or his authorized fabricator). Roto, Dorset, DNV Accado & Kinlong
70.	AAC block Adhesive	UltraTech, Perma, Ardex Endura & Ferrous Crete
71.	PVC Water Tank	Syntex & Vectus
72.	AAC Block	MAX Blocks, UltraTech, HIL & BILTECH ACE & Gravit
73.	Modular Kitchen	Everyday/Hettich/Steel Art Brand Baskets of AISI 304(18/8); Hettich/Hafele Brand Auto closing, Concealed Hinges; DMS/ Dynasty/ Indoline brand shutter
74.	Aluminum shuttering	Knest, S-form, Durand Forms (India) Pvt. Ltd. & Mivan
75.	MS Tubular windows & Pressed Steel door frames	Jangid Engineering Works, AGFUV, Sen Harvic, Navair Delhi & Sukriti Delhi
76.	Dash fasteners / Anchors	Hilti, Bosch & Fischer

8 Terms & Conditions of Contract

8.1 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.

8.2 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.
2. 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 material shall only be brought at site as per program finalized with 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.

8.3 Quality and Workmanship

1. 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 IS Specifications.
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 engineer-in-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 at any 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. The contractor should get the make/TDS documents approved before procuring any material at site. The TDS/Make once approved shall not be changed without any valid recorded reasons. 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 material 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 be suitable 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.

8.4 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.

8.5 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. The dismantled materials shall not be thrown anywhere in the campus. Proper space has been marked and these shall be deposited in C & D waste site only.

8.6 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-in-charge.

8.7 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.

8.8 Approach to Site

1. 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.

8.9 Water proofing

1. The agency have to associate with the specialized agency, if any requirement for water- proofing works. The agency must sign on MOU with the specialized

agency for waterproofing works as per above mentioned format.

2. The agency must submit the declaration as per Format 5.12 on completion of work.
3. The agency has to procure total quantity of water proofing materials at one go and the materials have to be deposited with the department along with the original copy of challan. A record of same should be made on Register issued by Engineer-In-Charge. Engineer-In-Charge has to make dated signature on each bucket. No empty bucket shall be allowed to takeaway till the completion of work. All empty bucket shall be removed after completion of work and checking the theoretical consumption of the material.
4. Water Proofing Treatment: The contractor must associate himself with the specialized firm, to be approved by the Engineer-in-charge in writing, for water proofing treatment using Liquid Waterproofing Membrane technologies for various structural elements. Guarantee in the prescribed proforma attached with tender document shall be given by the specialized firm, for a period of eight years from the date after the maintenance period prescribed in the contract, which shall be counter signed by the contractor as token of overall responsibility. In addition, 10% (ten percent) of the cost of water proofing items shall be retained as guarantee to watch the performance of the work done. However, half of this retained amount will be released after five years, if the performance of the work done is found satisfactory. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor. This guarantee deposit can however be released in full if a bank guarantee of equivalent amount for 08 years is produced and deposited with the department by the contractor (see Form 5.12).

Sl. No.	Roofing and water proofing
1	The following shall NOT be measured separately and shall be deemed to be included in the rates quoted.
2	Preparation of surface for laying of insulation and Waterproofing treatment as required by the specialist Contractors. The surface should be cleared of all loose mortar, dust and waste by hacking and cleaning with wire brush
3	All cutting, dressing, trimming and waste including cutting to required shapes.
4	Work in narrow widths, to required profiles and at all

	locations as shown
5	Work at all heights and depths.
6	Testing of treated areas in approved manner for performance of the treatment.
7	All protection to the water-proofing surfaces to prevent damage by other trades.
8	The treatment shall carry a guarantee of 08 years, which shall be given by the water - proofing specialist contractor and counter- signed by the main contractor. The main contractor shall be fully responsible for the performance of the water proofing treatment
9	Minor modifications in the contract specifications of the treatment, may be accepted according to the method of the treatment of the respective water-proofing specialist contractor.

8.10 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.

8.11 Acts and Laws

1. 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.

8.12 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.

8.13 Nondisclosure Agreement.

1. 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 breach 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.

8.14 Indemnification:

1. 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.

8.15 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 quarantine 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.

8.16 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.

8.17 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 appointed 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 thereunder 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 construed, interpreted and governed by the law of India, for the time being in force.

8.18 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.

9. Testing Charges

केन्द्रीय लोक निर्माण विभाग
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:

- i. By the contractor, if the result shows that material does not conform to the relevant codes/ specification.
- ii. 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.


(वी.पी. साहु) 22.10.2021
अधीक्षण अभियंता(सी.एंड एम.)
e-file 9116587

Issued from file No. CSQ/CM/16(1)/2021
प्रतिलिपि: सभी केलोनिवि तथा लोनिवि दिल्ली के अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।(केलोनिवि वेबसाईट के माध्यम से).

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

Annexure A for BoQ

Original Estimate					
N/W	Carrying out minor civil maintenance works in Academic Area Zone-4				
SLNo	Description	Qty	Unit	Rate	Amount
1	Carriage of Materials				
1.1	By Mechanical Transport including loading,unloading and stacking				
1.1.1	Earth Lead - 2	10	cum	245.82	2458.00
	Sub-Total				2458.00
2	EARTH WORK				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lif upto 1.5 m, as directed by Engineer-in- Charge:				
2.1.1	All kinds of soil	250	sqm	129.85	32463.00
2.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 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.				
2.2.1	All kinds of soil.	100	cum	260.30	26030.00
2.3	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:				
2.3.1	All kinds of soil				
2.3.1.1	Pipes, cables etc, not exceeding 80 mm dia.	10	metre	215.60	2156.00
2.3.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	30	metre	352.15	10565.00
2.3.1.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	10	metre	549.75	5498.00
2.4	Filling available excavated earth (excluding rock) in trenches, plinth, 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.	10	cum	196.00	1960.00
2.5	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	15	cum	2123.75	31856.00
2.6	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
2.6.1	All kinds of soil	500	sqm	34.15	17075.00
2.7	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.				

2.7.1	All kinds of soil	10	each	82.45	825.00
2.8	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	100	sqm	17.60	1760.00
2.9	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	100	sqm	8.95	895.00
	Sub-Total				131083.00
3	CEMENT CONCRETE (CAST IN SITU)				
3.1	Providing and laying in position excluding cement concrete of level: specified grade the cost of centering and shuttering - All work up to plinth				
3.1.1	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	5	cum	7878.50	39393.00
3.1.2	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	cum	6812.00	34060.00
3.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
3.2.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	5	cum	10357.55	51788.00
3.3	Centering and shuttering including strutting, propping etc. and removal of form work for:				
3.3.1	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	25	sqm	842.50	21063.00
3.4	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete.				
3.4.1	1:1.5:3 (1 Cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	10	cum	8726.85	87269.00
3.5	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5 mm nominal size derived from natural sources)	25	sqm	410.85	10271.00
3.6	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	50	per bag of 50kg cement used	18.15	908.00
3.7	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.	25	sqm	146.15	3654.00

3.8	Extra for concrete work in superstructure above floor V level for each four floors or part thereof by mechanical means.	5	cum	169.45	847.00
3.9	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 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 top smooth.	25	sqm	749.30	18733.00
	Sub-Total				267986.00
4	REINFORCED CEMENT CONCRETE				
4.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
4.1.1	1:1.5:3(1 cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	5	cum	9045.75	45229.00
4.1.2	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	5	cum	8583.40	42917.00
4.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
4.2.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	3	cum	10852.95	32559.00
4.3	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 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	3	cum	11505.50	34517.00
4.4	Centering and shuttering including strutting, propping etc. and removal of form for				
4.4.1	Foundations, footings, bases of columns, etc. for mass concrete	15	sqm	392.15	5882.00
4.4.2	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	15	sqm	842.50	12638.00
4.4.3	Suspended floors, roofs, landings, balconies and access platform	15	sqm	927.25	13909.00
4.4.4	Shelves (Cast in situ)	15	sqm	927.25	13909.00
4.4.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	15	sqm	736.40	11046.00
4.4.6	Columns, Pillars, Piers, Abutments, Posts and Struts	15	sqm	961.30	14420.00
4.4.7	Stairs, (excluding landings) except spiral-staircases	10	sqm	764.95	7650.00
4.4.8	Edges of slabs and breaks in floors and walls				
4.4.8.1	Under 20 cm wide	10	metre	208.55	2086.00
4.4.9	Weather shed, Chajjas, corbels etc., including edges	10	sqm	951.10	9511.00

4.5	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).				
4.5.1	Suspended floors, roofs, landings, beams and balconies (Plan area to be measured)	100	sqm	384.30	38430.00
4.6	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in lintels, beams and bressumers, including setting in cement mortar 1:3 (1 cement: 3 coarse sand), cost of required centering and shuttering but, excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	13899.20	13899.00
4.7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
4.7.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	500	kg	107.85	53925.00
4.8	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
4.8.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	800	kg	107.85	86280.00
	Sub-Total				438807.00
5	MASONRY WORK				
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
5.1.1	Cement mortar 1:6(1 cement :6 coarse sand)	7	cum	7132.25	49926.00
5.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
5.2.1	Cement mortar 1:6(1 cement : 6 coarse sand)	7	cum	9105.95	63742.00
5.3	Extra for brick work / AAC block masonry / Tile brick masonry in superstructure above floor V level, for each four floors or part thereof by mechanical means.	10	cum	169.45	1695.00
5.4	Brick work 7 cm thick with common burnt clay F.P.S. (non modular) brick of class designation 7.5 in cement mortar 1:3 (1 cement: 3 coarse sand) in superstructure above plinth level and upto floor five level.	25	sqm	865.65	21641.00
5.5	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
5.5.1	cement mortar 1:4(1 cement :4 coarse sand)	10	sqm	905.05	9051.00
5.6	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
5.6.1	Cement mortar 1:4(1 cement :4 coarse sand)	50	sqm	1123.80	56190.00
5.7	Brick work with common burnt clay selected F.P.S. (non 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 mortar 1:6 (1 cement: 6 coarse sand)				
5.7.1	Above plinth level upto floor V level	5	cum	9439.75	47199.00

5.8	Brick edging 7cm wide 11.4 cm deep to plinth protection with 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 sand).	50	metre	60.85	3043.00
	Sub-Total				252487.00
6	CLADDING WORK				
6.1	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.				
6.1.1	Granite stone slab of colour black, Cherry/Ruby red				
6.1.1.1	Area of slab upto 0.50 sqm	5	sqm	5413.50	27068.00
6.1.1.2	Area of slab over 0.50 sqm	10	sqm	5136.30	51363.00
6.2	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.				
6.2.1	Granite work	50	metre	510.95	25548.00
6.3	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. complete.	5	each	978.70	4894.00
6.4	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	25	sqm	506.70	12668.00
6.5	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
6.5.1	White Agaria Marble Stone	5	sqm	3500.45	17502.00
6.6	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.	50	sqm	1267.95	63398.00
	Sub-Total				202441.00
7	WOOD AND P. V. C. WORK				

7.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
7.1.1	Second class teak wood	0.1	cum	142949.70	14295.00
7.1.2	Sal wood	0.1	cum	116520.30	11652.00
7.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.				
7.2.1	Float glass panes				
7.2.1.1	4 mm thick glass pane (weight not less than 10 kg/sqm).	5	sqm	2241.80	11209.00
7.2.1.2	5.0 mm thick glass panes (weight not less than 12.50 kg/sqm).	5	sqm	2600.45	13002.00
7.3	Providing and fixing flat pressed three layer particle or graded plain wood board medium density exterior grade (Grade I) FPT-I, conforming and marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately):				
7.3.1	18 mm thick	5	sqm	1020.95	5105.00
7.4	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:				
7.4.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	10	sqm	2392.65	23927.00
7.4.2	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	5	sqm	2093.70	10469.00
7.5	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	25	sqm	462.35	11559.00
7.6	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
7.6.1	Rectangular or square	25	sqm	199.15	4979.00
7.7	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	25	sqm	106.70	2668.00
7.8	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete:				
7.8.1	2nd class teak wood				
7.8.1.1	50x12 mm	10	metre	221.10	2211.00
7.9	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm with two chromium plated brass brackets fixed with C.P. brass screws and PVC sleeves etc., wherever necessary complete:				
7.9.1	20 mm dia	10	metre	393.25	3933.00
7.9.2	25 mm dia	10	metre	525.55	5256.00

7.1	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
7.10.1	Fixed to steel windows by welding	10	kg	219.10	2191.00
7.11	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete (Copper oxidised as per IS 1378)				
7.11.1	300x16 mm	10	each	216.55	2166.00
7.11.2	250x16 mm	10	each	193.70	1937.00
7.12	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.12.1	250x10 mm	10	each	83.90	839.00
7.13	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.13.1	125 mm	10	each	39.95	400.00
7.13.2	100 mm	10	each	32.55	326.00
7.14	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.14.1	300 mm weighing not less than 330 grams	10	each	67.40	674.00
7.14.2	250 mm weighing not less than 280 grams	10	each	61.05	611.00
7.15	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
7.15.1	250x10 mm	5	each	441.60	2208.00
7.15.2	200x10 mm	5	each	358.40	1792.00
7.15.3	150x10 mm	5	each	287.25	1436.00
7.15.4	100x10 mm	5	each	197.50	988.00
7.16	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete.				
7.16.1	40 mm	5	each	311.20	1556.00
7.17	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob of approved quality with necessary screws.	5	each	74.25	371.00
7.18	Providing and fixing bright finished brass handles with screws etc. complete:				
7.18.1	125 mm	5	each	256.65	1283.00
7.18.2	100 mm	5	each	234.70	1174.00
7.18.3	75 mm	5	each	184.95	925.00
7.19	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	10	each	121.65	1217.00
7.2	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.	10	each	1124.85	11249.00
7.21	Providing and fixing chromium plated brass night latch of approved quality including necessary screws etc. complete.	5	each	952.80	4764.00
7.22	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 screws etc. complete :				

7.22.1	300x16 mm	10	each	303.25	3033.00
7.22.2	250x16 mm	10	each	260.60	2606.00
7.23	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 :				
7.23.1	250x10 mm	10	each	115.15	1152.00
7.23.2	200x10 mm	10	each	99.70	997.00
7.23.3	150x10 mm	10	each	82.55	826.00
7.23.4	100x10 mm	10	each	64.70	647.00
7.24	Providing and fixing aluminium pull bolt lock, 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 bolts, nut and washers etc. complete.	10	each	100.80	1008.00
7.25	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 :				
7.25.1	125 mm	10	each	66.25	663.00
7.25.2	100 mm	10	each	59.55	596.00
7.26	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.				
7.26.1	Twin rubber stopper	15	each	72.35	1085.00
7.27	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS: 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	15	each	868.95	13034.00

7.28	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.				
7.28.1	75 mm overall thickness partition with 12.5 mm thick double skin fire rated Glass Reinforced Gypsum (GRG) plaster board conforming to IS: 2095: part 3 (Board with BIS certification marks)	10	sqm	2131.10	21311.00
7.29	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete 2nd class teak wood.				
7.29.1	50x50 mm (base and height)	20	metre	354.35	7087.00
7.3	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5 mm fixed with wooden adhesive of approved quality and screws/nails on the edges of the Pre-laminated particle board as per direction of Engineer-in-charge.	20	metre	102.15	2043.00
7.31	Providing and fixing magnetic catcher of approved quality in cupboard/ ward robe shutters, including fixing with necessary screws etc. complete.				
7.31.1	Double strip (horizontal type)	25	each	39.70	993.00
7.32	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per directions of Engineer- in-charge,	10	one set	414.20	4142.00
7.33	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter with stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	10	each	20.40	204.00
7.34	Providing and fixing to existing door frames.				

7.34.1	<p>24 mm thick factory made PVC door shutters made of styles cleats. The shutter frame filled and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (\pm 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (\pm 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (\pm 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (\pm 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer- in-charge. (For W.C. and bathroom door shutter).</p>	10	sqm	2969.25	29693.00
7.35	<p>Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer- in-Charge.</p>	10	metre	492.70	4927.00
7.36	<p>Providing and fixing factory made PVC door shutter made of solid foam PVC profiles of thickness 5 mm and 15 mm at edges integrally extruded for vertical style and horizontal (top/ bottom/ lock) rails of minimum cross section of 70mmx 28mm, of shape and design as per manufacturer's specifications having homogenous fine cellular structure and smooth integral outer skin, inserted with G.I. 'C' section/ rectangular tube profile of minimum 0.30 mm thickness with 120 gsm coating as stifeners as per manufacturer's specifications Mitred cut joints for styles and rails provided with telescopic polymeric I' corners are jointed together using solvent adhesive and strenghtened with fully threaded stainless steel screws (of required size) through reinforced stifener with paneling of specified solid foam PVC board/ high pressure laminate of required thickness and of approved design and shade (matching the styles and rails), secured within styles and rails with specially designed solid foam PVC moulded beadings of required size using PVC solvent adhesive/ cement. The finished door shutter including SS hardware, 1 no. ss sliding bolt 200 x 10mm, 1 no. SS tower bolt 200 x 10 mm and 2 nos. SS handles 125mm, shall be fixed to frame with 3 nos. stainless steel hinges of minimum size 100x58x1.9 mm and stainless steel screws of required size complete as per direction of the Engineer-in-Charge. (Cost of above hardware is inclusive in rates)</p>				

7.36.1	5 mm thick solid foam PVC panel of required size with moulded/ extruded beading of appropriate design shape and size as per manufacturer's specifications (to secure the panel insert tight in place within the style and rails of shutter) matching the colour and shade of shutter frame. Non decorative type.	5	sqm	3754.20	18771.00
7.37	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
7.37.1	1.0 mm thick	10	sqm	897.30	8973.00
7.38	Providing and fixing factory made shutters of Pre-laminated particle board flat pressed three layer or graded wood particle board with one side decorative finish and other side balancing lamination conforming to IS: 12823 Grade I Type II, of approved design, and edges sealed with water resistant paint and lipped with aluminium 1.r type edge beading all- round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws, including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and direction of Engineer-in- Charge (Cost of 'U' beading and hinges will be paid for separately).				
7.38.1	25 mm thick	5	sqm	1801.60	9008.00
7.39	Providing and fixing aluminum U beading of required size to Pre- laminated/flush door shutter, including fixing etc. complete as per direction of Engineer-in-charge.	10	kg	596.15	5962.00
7.4	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm, placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self-tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200 mm C/C., all complete as per the drawing & directions of engineer-in-charge, the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish.				
7.40.1	Plain Gypsum plaster board conforming to IS: 2095 Part -1:2011 (Board with BIS certification marks)				
7.40.1.1	12.5 mm thick	10	sqm	1308.85	13089.00
7.41	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
7.41.1	35 mm thick shutters				
7.41.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size				
7.41.1.1	Second class teak wood	5	sqm	5024.15	25121.00

7.42	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.				
7.42.1	With 12 mm mild steel U beading	10	sqm	1228.00	12280.00
7.43	Providing and fixing plain lining with necessary screws/nuts & bolts/ nails, including a coat of approved primer on one face, and fixed on wooden /steel frame work, complete as per direction of Engineer-in- charge (Frame work shall be paid for separately).				
7.43.1	12 mm thick commercial ply conforming to IS : 1328 BWR type.	10	sqm	1224.65	12247.00
7.44	Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm (\pm 0.2 mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm, including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5 mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8 x100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.	25	metre	573.45	14336.00
7.45	35 mm thick factory made Solid panel PVC Door shutter, made out of single piece extruded solid PVC profiles, 5 mm (\pm 0.2 mm) thick, having styles & rails (except lock rail) of size 95 mm x 35 mm x 5 mm, out of which 75 mm shall be flat and 20 mm shall be tapered (on both side), having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power, including reinforcing with MS tube of size 40 mm X 20 mm x 1 mm, joints of styles & rails to be mitred cut & joint with the help of PVC solvent cement, self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm X 100 mm of cross section size 35 mm x 17 mm x 1 mm at each corner. Single piece extruded 5 mm thick solid PVC Lock rail of size 115 mm x 35 mm, out of which 75 mm to be flat and 20 mm to be tapered at both ends, having 15 mm solid core in middle of rail section integrally extruded, fixing the styles & rails with the help of solvent and self driven self tapping screws of 125 mm x 11 mm, including providing 5 mm Single piece solid PVC extruded sheet inserted in the door as panel, all complete as per manufacturer's specification and direction of Engineer-in-charge.				
7.45.1	Non decorative finish (matt finish)	10	sqm	3997.45	39975.00
7.45.2	Decorative finish (wood grained finish)	5	sqm	4713.05	23565.00

7.46	Providing and fixing factory made uPVC glazed/wire mesh windows/ doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 : Part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-Charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-Charge. Wire mesh / Glazing of plain/ toughened/ laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS: 16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering Institute, to be provided by the				
7.46.1	Two track two panels sliding window with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.				
7.46.1.1	Using R2 series with frame (40 mm & above) x (40 mm & above) & sash (25 mm & above) x (50 mm & above) with zinc alloy (zamak) powder coated touch locks with hook (Height upto 1.2 metre).	2	sqm	8298.85	16598.00
7.46.1.2	Using R3 series with frame (55 mm & above) x (40 mm & above) & sash (30 mm & above) x (55 mm & above) with zinc alloy (zamak) powder coated handle on every panel along with multi-point locking system (Height upto 1.8m).	2	sqm	8799.25	17599.00
7.46.1.3	Using R4 series with frame (64 mm & above) x (45 mm & above) & sash (44 mm & above) x (55 mm & above) with zinc alloy (zamak) powder coated handle on every panel along with multi-point locking system (Height above 1.8m).	2	sqm	9628.60	19257.00
7.46.2	Two track four panels sliding windows with Aluminium channel for roller track, wool pile, zinc alloy (zamak) powder coated handle on three panels along with multi-point locking system, nylon rollers with SS 304 body.				
7.46.2.1	Using R3 series with frame (55 mm & above) x (40 mm & above) & sash (30 mm & above) x (55 mm & above) (Height upto 1.8m).	2	sqm	7860.35	15721.00
7.46.2.2	Using R4 series with frame (64 mm & above) x (45 mm & above) & sash (44 mm & above) x (55 mm & above) (Height above 1.8m).	2	sqm	8579.55	17159.00

7.46.3	Fixed window/ ventilator without mullion /transom.				
7.46.3.1	Using R1 series with frame (33 mm & above) x (35 mm & above). (Height upto 0.90 metre)	2	sqm	8247.25	16495.00
7.46.3.2	Using R2 series with frame (39 mm & above) x (39 mm & above). (Height upto 1.2 metre)	2	sqm	8054.75	16110.00
7.46.3.3	Using R3 series with frame (55 mm & above) x (45 mm & above). (Height upto 2.5 metre)	2	sqm	7080.05	14160.00
7.46.4	Fixed window/ ventilator with mullion /transom.				
7.46.4.1	Using R1 series with frame (33 mm & above) x (35 mm & above) & mullion (33 mm & above) x (50 mm & above). (Height upto 0.90 metre)	2	sqm	9155.20	18310.00
7.46.4.2	Using R2 series with frame (39 mm & above) x (39 mm & above) & mullion (39 mm & above) x (60 mm & above). (Height upto 1.2 metre)	2	sqm	8765.40	17531.00
7.46.4.3	Using R3 series with frame (55 mm & above) x (45 mm & above) & mullion (55 mm & above) x (65 mm & above). (Height upto 2.5 metre)	2	sqm	7827.75	15656.00
7.46.5	Casement window double panels with fixed mullion with S.S. 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles.				
7.46.5.1	Using R2 series with frame (39 mm & above) x (39 mm & above) & sash (39 mm & above) x (60 mm & above) & mullion (39 mm & above) x (60 mm & above). (Height upto 1.2 metre).	2	sqm	13078.70	26157.00
7.46.5.2	Using R3 series with frame (55 mm & above) x (45 mm & above) & sash (55 mm & above) x (65 mm & above) & mullion (55 mm & above) x (65 mm & above). (Height upto 1.8 metre).	2	sqm	12472.95	24946.00
7.46.5.3	Using R4 series with frame (64 mm & above) x (50 mm & above) & sash (64 mm & above) x (70 mm & above) & mullion (64 mm & above) x (70 mm & above). (Height above 1.8 metre).	2	sqm	13477.10	26954.00
7.46.6	Casement cum fixed panel window having one single casement panel & one fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles.				
7.46.6.1	Using R2 series with frame (39 mm & above) x (39 mm & above) & sash (39 mm & above) x (60 mm & above) & mullion (39 mm & above) x (60 mm & above). (Height upto 1.2 metre; each openable shutter upto 0.8m width)	2	sqm	9870.15	19740.00
7.46.6.2	Using R3 series with frame (55 mm & above) x (45 mm & above) & sash (55 mm & above) x (65 mm & above) & mullion (55 mm & above) x (65 mm & above). (Height upto 1.8 metre; each openable shutter upto 0.8m width)	2	sqm	9308.00	18616.00
7.46.7	Casement door single panel with zinc alloy (zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (zamak) powder coated handles on both sides.				
7.46.7.1	Using R3 series with frame (55 mm & above) x (50 mm & above) & sash (55 mm & above) x (85 mm & above) (Height upto 2.5 metre).	2	sqm	12496.05	24992.00
7.46.7.2	Using R4 series with frame (64 mm & above) x (55 mm & above) & sash (64 mm & above) x (100 mm & above). (Height above 2.5 metre).	2	sqm	12454.40	24909.00

7.46.8	Casement door double panel with French (False) Mullion with zinc alloy (zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (zamak) powder coated handles on both sides.				
7.46.8.	Using R3 series with frame (55 mm & above) x (50 mm & above) & sash (55 mm & above) x (85 mm & above) & French (False) mullion (55 mm & above) x (60 mm & above). (Height upto 2.5 metre).	2	sqm	11903.75	23808.00
7.46.8.	Using R4 series with frame (64 mm & above) x (55 mm & above) & sash (64 mm & above) x (100 mm & above) & French (False) mullion (64 mm & above) x (60 mm & above). (Height above 2.5 metre).	2	sqm	11818.95	23638.00
7.47	Providing and fixing casement handle made of zinc alloyed (white powder coated) for uPVC casement window with necessary screws etc. complete.	5	each	231.05	1155.00
7.48	Providing and fixing steel roller for uPVC sliding window with necessary screws etc. complete.	5	each	115.80	579.00
7.49	Providing and fixing steel roller for uPVC sliding door with necessary screws etc. complete.	5	each	185.50	928.00
7.5	Providing and fixing steel (white power coated) crescent lock for uPVC sliding window/ door with necessary screws etc. complete.	5	each	198.30	992.00
7.51	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically & horizontally) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors, windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer-in-charge.	50	kg	166.80	8340.00
7.52	Providing and fixing panelling or paneling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebated to be measured). Panelling for panelled and glazed shutters 25 mm to 40 mm thick: Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick conforming to IS:14587	5	sqm	1956.90	9785.00
7.53	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				
7.53.1	125 mm	5	each	119.20	596.00
7.53.2	100mm	5	each	90.45	452.00
	Sub-Total				858929.00
8	STEEL WORK				
8.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	25	kg	117.35	2934.00
8.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	25	kg	133.70	3343.00

8.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	3	sqm	11439.60	34319.00
8.4	Providing and fixing 1 mm thick M.S. sheet sliding-shutters, with frame and diagonal braces of 40x40x6 mm angle iron, 3 mm M.S. gusset plates at the junctions and corners, 25 mm dia pulley, 40x40x6 mm angle and 1- iron guide at the top and bottom respectively, including applying a priming coat of approved steel primer	3	sqm	6566.20	19699.00
8.5	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.				
8.5.1	Using M.S. angels 40x40x6 mm for diagonal braces	7	sqm	5804.35	40630.00
8.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
8.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	7	sqm	3653.20	25572.00
8.7	Providing and fixing ball bearing for rolling shutters.	7	each	492.35	3446.00
8.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
8.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	7	sqm	1281.35	8969.00
8.9	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, priming coat of approved steel primer, but excluding the cost of other fittings,glass panes complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
8.9.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	10	kg	131.05	1311.00
8.1	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				

8.10.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	10	kg	141.70	1417.00
8.11	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer- in-charge:				
8.11.1	Profile B				
8.11.1.	Fixing with adjustable lugs with split end tail to each jamb	15	metre	583.30	8750.00
8.11.2	Profile C				
8.11.2.	Fixing with adjustable lugs with split end tail to each jamb	15	metre	611.75	9176.00
8.12	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
8.12.1	Hot finished welded type tubes	50	kg	194.40	9720.00
8.13	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	10	kg	97.20	972.00
8.14	Welding by gas or electric plant including transportation of plant at site etc. complete.	1000	cm	3.70	3700.00
8.15	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.				
8.15.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	150	kg	123.60	18540.00
8.15.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	100	kg	172.60	17260.00
8.16	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
8.16.1	M.S. tube	75	kg	196.80	14760.00
8.16.2	G.I. pipes	15	kg	203.05	3046.00
8.17	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/mm ²), 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.				
8.17.1	10 x 80 mm	25	each	137.65	3441.00
8.17.2	10 x 120 mm	25	each	170.95	4274.00
8.17.3	10 x 140 mm	25	each	182.20	4555.00

8.18	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, bufing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	30	kg	772.40	23172.00
8.19	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:				
8.19.1	4.0 mm thick glass panes	25	sqm	1064.65	26616.00
8.19.2	5.5 mm thick glass panes	20	sqm	1390.15	27803.00
8.2	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.	25	kg	130.50	3263.00
	Sub-Total				320688.00
9	FLOORING				
9.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:				
9.1.1	1:6 (1cement :6 coarse sand)	30	sqm	965.55	28967.00
9.2	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.				
9.2.1	40 mm thick with 20 mm nominal size stone aggregate	50	sqm	614.20	30710.00
9.3	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.				
9.3.1	18 mm thick	25	sqm	662.05	16551.00
9.4	Cement concrete pavement with 1:2:4(1 cement: 2 coarse sand :4 graded stone aggregate 20 mm nominal size), including finishing complete.	7	cum	8595.15	60166.00
9.5	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12 mm thick with white, black, chocolate, grey yellow or green marble chips of sizes from 7 mm to 10 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix: 3 marble chips) by volume, including cement slurry etc. complete				
9.5.1	Medium shade pigment with 50% white cement and 50% ordinary cement	10	sqm	1129.45	11295.00

9.6	Marble chips skirting up to 30 cm height, rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement: 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix: 7 marble chips) by volume:				
9.6.1	18 mm thick with under layer 12 mm thick in cement plaster 1:3(1 cement: 3 coarse sand) :				
9.6.1.1	Medium shade pigment with 50% white cement and 50% ordinary cement	5	sqm	1873.65	9368.00
9.7	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
9.7.1	40 mm wide and 4 mm thick	50	metre	91.75	4588.00
9.8	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in- Charge.				
9.8.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
9.8.1.1	Acid and alkali resistant tile	7	sqm	1738.15	12167.00
9.8.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
9.8.2.1	Acid and alkali resistant tile	10	sqm	1884.90	18849.00
9.9	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
9.9.1	25 mm thick	10	sqm	1948.25	19483.00
9.1	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	10	sqm	2354.70	23547.00
9.11	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement: 5 coarse sand) with joints finished flush.				
9.11.1	Red sand stone	10	sqm	1280.10	12801.00
9.12	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar.				
9.12.1	Red sand stone	10	sqm	1647.00	16470.00
9.13	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement :4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	25	sqm	1096.55	27414.00

9.14	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matching pigments etc., complete.	10	sqm	1315.30	13153.00
9.15	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.				
9.15.1	Size of Tile 500x500 mm	10	sqm	1524.30	15243.00
9.15.2	Size of Tile 600x600 mm	30	sqm	1553.45	46604.00
9.16	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.				
9.16.1	Size of Tile 600x600 mm	25	sqm	1623.05	40576.00
9.17	Providing and laying Vitrified 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 brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
9.17.1	Size of Tile 600x600 mm	10	sqm	1893.90	18939.00
9.18	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				
9.18.1	Size of Tile 600x600 mm	10	sqm	309.05	3091.00
9.19	Providing and laying Vitrified tiles in floor with diferent sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
9.19.1	Size of Tile 600x600 mm	20	sqm	1725.35	34507.00

9.2	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :				
9.20.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	7	sqm	3186.70	22307.00
9.21	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
9.21.1	Polished Granite stone slab of colour Black, Cherry/Ruby Red or equivalent	5	sqm	4481.30	22407.00
	Sub-Total				509203.00
10	ROOFING				
10.1	Providing corrugated G.S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
10.1.1	0.80 mm thick with zinc coating not less than 275 gm/m2	20	sqm	1257.55	25151.00
10.1.2	0.63 mm thick with zinc coating not less than 275 gm/ m2	30	sqm	1087.65	32630.00
10.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc.:				
10.2.1	0.80 mm thick	25	metre	92.95	2324.00
10.2.2	0.63 mm thick	25	metre	92.95	2324.00
10.3	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete.				
10.3.1	0.80 mm thick with zinc coating not less than 275 gm/m2	5	metre	1083.30	5417.00
10.3.2	0.63 mm thick with zinc coating not less than 275 gm/m2	5	metre	980.50	4903.00
10.4	Providing valleys of 90 cm wide overall in plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete :				
10.4.1	1.60 mm thick with zinc coating not less than 350 gm/m2	5	metre	1863.90	9320.00

10.5	Providing and fixing of 40 cm overall width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts, G.I. limpet and bitumen washer complete, bent to shape and fixed in wall with cement mortar 1:3 (1 cement: 3 coarse sand).				
10.5.1	1.00 mm thick with zinc coating not less than 275 gm/m ²	5	metre	857.55	4288.00
10.6	Providing and laying brick tiles over mummy roofs, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over 12 mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat:				
10.6.1	With common burnt clay F.P.S. (non modular) brick tiles of class designation 10	10	sqm	607.40	6074.00
10.7	Providing gola 75x75 mm in cement concrete 1:2:4(1 cement :2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design :				
10.7.1	In 75x75 mm deep chase	20	metre	305.15	6103.00
10.8	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	10	each	298.25	2983.00
10.9	Providing and fixing plain multipurpose cement board(Hight pressure steam cured) with suitable screws for cement particle board in ceiling etc. complete (frame work to be paid seperately).				
10.9.1	6 mm thick Cement fiber board, Type-B, Category-III as per IS: 14862 :2000	5	sqm	921.95	4610.00
10.1	Extra for sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling.	25	sqm	607.45	15186.00
10.11	Providing fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8183, density 24kg / m ³ , 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 building.	25	sqm	703.05	17576.00
10.12	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :				
10.12.1	100 mm diameter	10	each	362.85	3629.00
10.12.2	150 mm diameter	10	each	395.60	3956.00
10.13	Providing lead caulked joints to sand cast iron rain water pipes and fittings:				
10.13.1	100 mm dia Pipe	15	each	580.50	8708.00
10.13.2	150 mm dia Pipe	15	each	798.00	11970.00
10.14	Providing, fixing and embedding sand cast iron accessories for rain water pipes in the masonry surrounded with 12 mm thick cement mortar of the same mix, as that of masonry (lead caulking will be paid for separately):				

10.14.1	Sand cast iron plain shoes:				
10.14.1	150 mm diameter	10	each	511.90	5119.00
10.15	Providing and fixing on wall face 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, (i) Single socketed pipes.				
10.15.1	75 mm diameter	20	metre	248.80	4976.00
10.15.2	110 mm diameter	20	metre	377.40	7548.00
10.16	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.				
10.16.1	Coupler				
10.16.1	110 mm	10	each	136.15	1362.00
10.16.2	Single pushfit Coupler				
10.16.2	75 mm	10	each	93.10	931.00
10.16.2	110 mm	10	each	127.60	1276.00
10.16.3	Single tee with door				
10.16.3	75x75x75 mm	10	each	164.20	1642.00
10.16.3	110x110x110 mm	10	each	234.15	2342.00
10.16.4	Single tee without door				
10.16.4	75x75x75 mm	10	each	144.30	1443.00
10.16.4	110x110x110 mm	10	each	221.35	2214.00
10.16.5	Bend 87.5°				
10.16.5	75 mm bend	10	each	105.90	1059.00
10.16.5	110 mm bend	10	each	150.35	1504.00
10.16.6	Shoe (Plain)				
10.16.6	75 mm Shoe	10	each	93.10	931.00
10.16.6	110 mm Shoe	10	each	131.85	1319.00
10.17	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.				
10.17.1	75 mm	20	each	369.85	7397.00
10.17.2	110 mm	20	each	371.30	7426.00

10.18	Providing and fixing false ceiling at all heights including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, difusers,				
10.18.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)	10	sqm	1355.80	13558.00
10.18.2	12.5 mm thick tapered edge Glass Reinforced Gypsum (GRG) board conforming to IS: 2095- (Part 3):1996 (Boards with BIS certification marks)	10	sqm	1520.10	15201.00
10.19	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'S' or 'L' hooks, bolts & nuts 8 mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
10.19.1	2 mm thick corrugated (2.5" Or4.2" or 6") or step-down (2" or 3" or 6") as specified	20	sqm	1401.35	28027.00
10.19.2	2 mm thick flat	20	sqm	1245.65	24913.00

10.2	<p>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 wherever required.</p>	20	sqm	738.65	14773.00
10.21	<p>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 GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p>				
10.21.1	<p>GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.</p>	10	sqm	1902.95	19030.00

10.21.2	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.	10	sqm	2215.15	22152.00
10.21.3	12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre conforming to IS: 2095 part I, of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48 mm and the side borders of 30 mm, backed with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.79	10	sqm	1528.00	15280.00
10.22	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using al. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T'. Bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-	10	sqm	2158.15	21582.00

10.23	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with the help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with the help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with :				
10.23.1	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted afer bending.	10	sqm	2221.70	22217.00
10.23.2	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted afer bending and perforation.	10	sqm	2354.65	23547.00
10.24	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m3, 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	25	sqm	358.50	8963.00

10.25	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gms/ sqm (both side inclusive) as per IS : 277 and consisting of angle cleat of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm c/c, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25 x10 x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45 x15 x 0.90 mm running at the spacing of 1200 mm c/c, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5mm, at 450 mm c/c, shall be fixed in a direction perpendicular to G.I intermediate channel with connecting clip made out of 2.64 mm dia x 230 mm long G.I wire at every junction, including fixing perimeter channels 0.50 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/ partitions with the help of Rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of Calcium Silicate Board to ceiling section and perimeter channels with the help of dry wall screws of size 3.5 x25 mm at 230 mm c/c, including jointing & finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes,finishing with jointing compounds in three layers covering up to 150 mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making opening for light fittings, grills, difusers, cut outs made				
10.25.1	8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.	5	sqm	1572.30	7862.00
10.26	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183,density 48 kg/ 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 building.	20	sqm	667.05	13341.00
	Sub-Total				466087.00
11	FINISHING				
11.1	12 mm cement plaster of mix:				
11.1.1	1:6 (1 cement: 6 coarse sand)	100	sqm	343.65	34365.00
11.2	15 mm cement plaster on rough side of single or half brick wall of mix:				
11.2.1	1:6(1 cement: 6 coarse sand)	100	sqm	395.35	39535.00
11.3	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	50	sqm	506.60	25330.00
11.4	6 mm cement plaster of mix:				
11.4.1	1:3(1 cement :3 fine sand)	50	sqm	300.45	15023.00
11.5	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	50	sqm	87.10	4355.00
11.6	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):				

11.6.1	Flush / Ruled/ Struck or weathered pointing	50	sqm	257.35	12868.00
11.7	Pointing on tile brick work with cement mortar 1:3 (1 cement: 3 fine sand):				
11.7.1	Flush/ Ruled/ Struck or weathered pointing	10	sqm	350.20	3502.00
11.8	White washing with lime to give an even shade:				
11.8.1	New work (three or more coats)	50	sqm	39.05	1953.00
11.9	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:				
11.9.1	New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	200	sqm	185.65	37130.00
11.1	Finishing walls with Acrylic Smooth exterior paint of required shade:				
11.10.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	150	sqm	160.60	24090.00
11.11	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces:				
11.11.1	Two coats	50	sqm	161.70	8085.00
11.12	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer on new work:				
11.12.1	100 mm diameter pipes	30	metre	76.35	2291.00
11.12.2	150 mm diameter pipes	30	metre	113.80	3414.00
11.13	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work.				
11.13.1	100 mm diameter pipes	50	metre	82.00	4100.00
11.13.2	150 mm diameter pipes	50	metre	122.15	6108.00
11.14	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
11.14.1	Two or more coats on new work	50	sqm	155.90	7795.00
11.15	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
11.15.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	50	sqm	226.25	11313.00
11.16	French spirit polishing :				
11.16.1	Two or more coats on new works including a coat of wood filler	30	sqm	446.25	13388.00
11.17	Polishing on wood work with ready mixed wax polish of approved brand and manufacture :				
11.17.1	New work	10	sqm	197.65	1977.00
11.18	Lettering with black Japan paint of approved brand and manufacture	100	per letter per cm height	6.15	615.00

11.19	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15 mm cement plaster 1:1/2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in-charge (payment for providing grooves shall be made separately).	10	sqm	1162.25	11623.00
11.2	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :				
11.20.1	15 mm wide and 15 mm deep groove	50	metre	75.15	3758.00
11.21	Extra for washed grit plaster on exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	30	sqm	165.85	4976.00
11.22	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), nailed to the under layer with rust proof screws and nails and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	20	metre	100.60	2012.00
11.23	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster.	10	sqm	76.05	761.00
11.24	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.	100	sqm	156.05	15605.00
11.25	Distemping with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and manufacturer including applying additional coats wherever required to achieve even shade and colour				
11.25.1	Old work (one or more coats)	250	sqm	62.70	15675.00
11.26	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
11.26.1	One coat	30	sqm	92.00	2760.00
11.26.2	Two coats	10	sqm	137.45	1375.00
11.27	6 mm plaster on cement concrete or reinforced cement concrete work with white cement based polymer modified self curing mortar of approved make as per the direction of Engineer-In-Charge.	20	sqm	269.15	5383.00
11.28	White washing with lime to give an even shade:				
11.28.1	Old work (two or more coats)	30	sqm	22.85	686.00

11.29	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	50	sqm	19.75	988.00
11.3	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	250	sqm	25.15	6288.00
11.31	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
11.31.1	One or more coats on old work	100	sqm	102.80	10280.00
11.32	French spirit polishing :				
11.32.1	One or more coats on old work	30	sqm	224.80	6744.00
11.33	Polishing on wood work with ready made wax polish of approved brand and manufacture :				
11.33.1	Old work	5	sqm	99.80	499.00
11.34	Finishing walls with textured exterior paint of required shade:				
11.34.1	Old work (Two or more coats on existing cement paint surface applied @ 3.28 Itr/10 sqm.	10	sqm	169.20	1692.00
11.34.2	Old work (One or more coats) applied @ 1.82 Itr/10 sqm.	10	sqm	109.10	1091.00
11.35	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
11.35.1	Old work (Two or more coats applied @ 1.43 V/ 10 sqm) over existing cement paint surface	80	sqm	131.30	10504.00
	Sub-Total				359937.00
12	REPAIRS TO BUILDING				
12.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
12.1.1	With cement mortar 1:4 (1cement: 4 coarse sand)	30	sqm	560.50	16815.00
12.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
12.2.1	Door chowkhats	10	each	1782.55	17826.00
12.2.2	Window chowkhats	5	each	1125.15	5626.00
12.3	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface including disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.				
12.3.1	For door/ window/ clerestory window	15	sqm	1264.35	18965.00
12.4	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				

12.4.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	10	sqm	1090.65	10907.00
12.5	Renewal of old putty of glass panes (length)	100	metre	56.15	5615.00
12.6	Refixing old glass panes with putty and nails	10	sqm	729.85	7299.00
12.7	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.	25	sqm	72.45	1811.00
12.8	Providing and fixing bright finished brass hard drawn hooks and eyes :				
12.8.1	300 mm	10	each	101.85	1019.00
12.9	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube chollies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge. The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once irrespective of duration of scaffolding. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.	250	sqm	338.25	84563.00
12.1	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer- in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	500	litre	0.50	250.00
12.11	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in- charge.	25	each	288.10	7203.00
12.12	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	500	sqm	3.45	1725.00
12.13	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge. (a) Internal Work- Exposed on wall	25	metre	3.25	81.00

12.14	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.	10	each	429.10	4291.00
	Sub-Total				183996.00
13	Dismantling and Demolishing				
13.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
13.1.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	3	cum	2434.25	7303.00
13.1.2	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	3	cum	1503.60	4511.00
13.2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	3	cum	3551.25	10654.00
13.3	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	5	sqm	1147.20	5736.00
13.4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
13.4.1	In cement mortar	3	cum	2060.20	6181.00
13.5	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):				
13.5.1	From brick work in cement mortar	3	1000 Nos	6700.80	20102.00
13.6	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
13.6.1	Of area 3 sq. metres and below	20	each	367.20	7344.00
13.6.2	Of area beyond 3 sq. metres	10	each	502.75	5028.00
13.7	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :				
13.7.1	Of area 3 sq. metres and below	25	each	143.50	3588.00
13.8	Dismantling wood work in frames, trusses, purlins and rafters up to 10 metres span and 5 metres height including stacking the material within 50 metres lead :				
13.8.1	Of sectional area below 40 square centimetres	50	metre	17.85	893.00
13.9	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	500	kg	5.65	2825.00
13.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
13.10.1	For thickness of tiles 10 mm to 25 mm	100	sqm	73.40	7340.00
13.11	Demolishing dry brick pitching in floors, drains etc. including stacking of serviceable material and disposal of unserviceable material within 50 metres lead :	5	cum	1317.65	6588.00

13.12	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	10	sqm	266.45	2665.00
13.13	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:				
13.13.1	G.S. Sheet	50	sqm	164.95	8248.00
13.14	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of:				
13.14.1	T' or 'L' iron or pipe	10	each	230.90	2309.00
13.15	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	100	kg	36.80	3680.00
13.16	Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead.	50	sqm	75.80	3790.00
13.17	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 metres lead :				
13.17.1	Up to 10 mm thick	10	sqm	61.00	610.00
13.17.2	Thickness above 10 mm up to 25 mm	10	sqm	77.75	778.00
13.17.3	Thickness above 25 mm up to 40	50	sqm	90.35	4518.00
13.18	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	50	sqm	56.35	2818.00
13.19	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :				
13.19.1	100 mm dia pipe	50	metre	78.00	3900.00
13.2	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:				
13.20.1	Up to 150 mm diameter	25	metre	332.40	8310.00
13.21	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead including refilling the excavated gap.	2	each	958.75	1918.00
13.22	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	25	sqm	54.65	1366.00
13.23	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer- in-charge.	100	sqm	56.35	5635.00
13.24	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	200	cum	263.95	52790.00

	Sub-Total				191428.00
14	ROAD WORK				
14.1	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.				
14.1.1	Bituminous portion	3	cum	5032.25	15097.00
14.2	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.				
14.2.1	With G.I. barbed wire	200	metre	22.10	4420.00
14.3	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	50	kg	125.75	6288.00
14.4	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, including cleaning the surface of ail dirt, scales, oil, grease and other foreign material etc. and lining out complete.				
14.4.1	New work (Two or more coats)	10	sqm	188.20	1882.00
14.4.2	Old work (One or more coats)	10	sqm	120.80	1208.00
14.5	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.				
14.5.1	New work (Two or more coats)	10	sqm	288.90	2889.00
14.5.2	Old work (One or more coats)	10	sqm	189.85	1899.00
14.6	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	2	cum	10117.60	20235.00

14.7	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately).	5	cum	9823.80	49119.00
14.8	Deduct for using of M-20 grade concrete instead of M-25 grade concrete in C.C. pavement.	10	cum	203.80	2038.00
14.9	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50 mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.				
14.9.1	60 mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	30	sqm	1045.65	31370.00
	Sub-Total				136445.00
15	SANITARY INSTALLATIONS				
15.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
15.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	2	each	6767.40	13535.00
15.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
15.2.1	W.C. pan with ISI marked white solid plastic seat and lid	3	each	6515.55	19547.00
15.3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
15.3.1	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	2	each	1879.20	3758.00
15.3.2	White Vitreous China Surgeon type wash basin of size 660x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow including operated levers	2	each	3600.60	7201.00

15.4	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
15.4.1	Kitchen sink with drain board				
15.4.1.1	510x1040 mm bowl depth 250 mm	3	each	6945.60	20837.00
15.4.2	Kitchen sink without drain board				
15.4.2.1	610x460 mm bowl depth 200 mm	3	each	3873.80	11621.00
15.4.2.2	470x420 mm bowl depth 178 mm	3	each	3407.20	10222.00
15.5	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste and 40 mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :				
15.5.1	Size 450x300x150 mm	3	each	5020.85	15063.00
15.5.2	Size 600x450x200 mm	3	each	6585.80	19757.00
15.6	Providing and fixing white vitreous china water closet squatting pan (Indian type) :				
15.6.1	Orissa pattern W.C. pan of size 580x440 mm	2	each	3169.05	6338.00
15.7	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	3	each	2784.95	8355.00
15.8	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	5	each	349.15	1746.00
15.9	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
15.9.1	10 litre capacity - White	5	each	1190.65	5953.00
15.1	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				
15.10.1	White solid plastic seat with lid	10	each	684.85	6849.00
15.11	Providing and fixing CP Brass 32 mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	10	each	1034.80	10348.00
15.12	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :				
15.12.1	Flat back wash basin of size 550x400 mm	5	each	992.60	4963.00
15.13	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings :				
15.13.1	Size 450x300x150 mm	5	each	2512.75	12564.00
15.13.2	Size 600x450x200 mm	5	each	4077.65	20388.00
15.14	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
15.14.1	Semi rigid pipe				
15.14.1.1	32 mm dia	10	each	103.90	1039.00
15.14.1.2	40 mm dia	10	each	116.70	1167.00
15.14.2	Flexible pipe				
15.14.2.1	32 mm dia	10	each	119.55	1196.00
15.14.2.2	40 mm dia	10	each	119.55	1196.00

15.15	Providing and fixing 100 mm sand cast Iron grating for gully trap.	5	each	53.25	266.00
15.16	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	5	each	1607.95	8040.00
15.17	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
15.17.1	Rectangular shape 1500x450 mm	5	each	2093.00	10465.00
15.18	Providing and fixing toilet paper holder :				
15.18.1	C.P. brass	5	each	803.70	4019.00
15.19	Providing and fixing soil, waste and vent pipes :				
15.19.1	100 mm dia				
15.19.1	Sand cast iron S&S pipe as per IS: 1729	10	metre	1151.90	11519.00
15.19.1	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	5	metre	1169.30	5847.00
15.19.2	75 mm diameter :				
15.19.2	Sand cast iron S&S pipe as per IS: 1729	10	metre	1044.75	10448.00
15.2	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :				
15.20.1	75 mm dia pipe	5	each	168.20	841.00
15.20.2	100 mm dia pipe	5	each	198.15	991.00
15.21	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
15.21.1	For 100 mm dia pipe	10	each	362.85	3629.00
15.21.2	For 75 mm dia pipe	10	each	360.00	3600.00
15.22	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
15.22.1	100 mm dia				
15.22.1	Sand cast iron S&S as per IS - 1729	10	each	598.50	5985.00
15.22.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	5	each	567.20	2836.00
15.22.2	75 mm dia				
15.22.2	Sand cast iron S&S as per IS - 1729	10	each	501.45	5015.00
15.22.2	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	5	each	418.95	2095.00
15.23	Providing and fixing plain bend of required degree.				
15.23.1	100 mm dia				
15.23.1	Sand cast iron S&S as per IS - 1729	5	each	470.45	2352.00
15.23.1	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	5	each	368.00	1840.00
15.23.2	75 mm dia				
15.23.2	Sand cast iron S&S as per IS -1729	5	each	376.25	1881.00
15.23.2	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	5	each	252.50	1263.00

15.24	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
15.24.1	100x100x100 mm				
15.24.1	Sand cast iron S&S as per IS - 1729	5	each	726.55	3633.00
15.24.2	75x75x75 mm				
15.24.2	Sand cast iron S&S as per IS - 1729	5	each	629.50	3148.00
15.25	Providing and fixing single equal plain junction of required degree :				
15.25.1	100x100x100 mm				
15.25.1	Sand cast iron S&S as per IS - 1729	5	each	626.95	3135.00
15.25.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	5	each	581.45	2907.00
15.25.2	75x75x75 mm				
15.25.2	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	5	each	337.85	1689.00
15.26	Providing and fixing terminal guard :				
15.26.1	100 mm				
15.26.1	Sand cast iron S&S as per IS - 1729	5	each	442.00	2210.00
15.26.2	75 mm				
15.26.2	Sand cast iron S&S as per IS - 1729	5	each	340.70	1704.00
15.26.2	Sand cast iron S&S as per IS - 3989	5	each	404.75	2024.00
15.27	Providing and fixing collar :				
15.27.1	100 mm				
15.27.1	Sand cast iron S&S as per IS - 1729	5	each	463.35	2317.00
15.27.2	75 mm				
15.27.2	Sand cast iron S&S as per IS - 1729	5	each	305.15	1526.00
15.28	Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe				
15.28.1	100 mm dia				
15.28.1	SS 304 grade coupling with EPDM rubber gasket	5	each	432.05	2160.00
15.28.2	75 mm dia				
15.28.2	SS 304 grade coupling with EPDM rubber gasket	5	each	389.05	1945.00
15.29	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :				
15.29.1	100 mm	5	each	622.50	3113.00
15.29.2	75 mm	5	each	526.25	2631.00
15.3	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
15.30.1	100 mm inlet and 100 mm outlet				
15.30.1	Sand cast iron S&S as per IS: 3989	5	each	1996.50	9983.00
15.30.2	100 mm inlet and 75 mm outlet				
15.30.2	Sand cast iron S&S as per IS - 3989	5	each	1975.15	9876.00
15.31	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
15.31.1	100 mm diameter pipe	5	metre	82.80	414.00
15.31.2	75 mm diameter pipe	5	metre	62.95	315.00

15.32	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	5	each	231.95	1160.00
15.33	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	3	each	14999.15	44997.00
	Sub-Total				387462.00
16	WATER SUPPLY				
16.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
16.1.1	15 mm nominal dia Pipes	10	metre	286.80	2868.00
16.1.2	20 mm nominal dia Pipes	10	metre	335.00	3350.00
16.1.3	25 mm nominal dia Pipes	10	metre	401.55	4016.00
16.1.4	32 mm nominal dia Pipes	10	metre	518.75	5188.00
16.1.5	40 mm nominal dia Pipes	10	metre	702.95	7030.00
16.1.6	50 mm nominal dia Pipes	10	metre	934.15	9342.00
16.2	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall				
16.2.1	15 mm dia nominal bore	10	metre	366.40	3664.00
16.2.2	20 mm dia nominal bore	10	metre	437.30	4373.00
16.2.3	25 mm dia nominal bore	10	metre	551.70	5517.00
16.2.4	32 mm dia nominal bore	10	metre	667.00	6670.00
16.2.5	40 mm dia nominal bore	10	metre	811.90	8119.00
16.2.6	50 mm dia nominal bore	10	metre	1048.35	10484.00
16.3	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 :				
16.3.1	15 mm dia nominal bore	10	metre	580.45	5805.00
16.3.2	20 mm dia nominal bore	10	metre	635.20	6352.00
16.4	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
16.4.1	25 mm dia nominal bore	10	metre	467.75	4678.00
16.4.2	32 mm dia nominal bore	10	metre	540.30	5403.00
16.4.3	40 mm dia nominal bore	10	metre	617.05	6171.00
16.4.4	50 mm dia nominal bore	10	metre	762.15	7622.00
16.4.5	65 mm dia nominal bore	10	metre	896.60	8966.00
16.4.6	80 mm dia nominal bore	10	metre	1041.70	10417.00
16.5	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 :				

16.5.1	25 to 40 mm nominal bore	5	each	911.90	4560.00
16.5.2	50 to 80 mm nominal bore	3	each	1785.35	5356.00
16.6	Providing and fixing brass bib cock of approved quality :				
16.6.1	15 mm nominal bore	5	each	353.25	1766.00
16.6.2	20 mm nominal bore	5	each	379.20	1896.00
16.7	Providing and fixing brass stop cock of approved quality :				
16.7.1	15 mm nominal bore	5	each	353.25	1766.00
16.7.2	20 mm nominal bore	5	each	379.20	1896.00
16.8	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
16.8.1	25 mm nominal bore	5	each	622.40	3112.00
16.8.2	20 mm nominal bore	5	each	539.95	2700.00
16.8.3	32 mm nominal bore.	5	each	689.60	3448.00
16.8.4	40 mm nominal bore	5	each	826.10	4131.00
16.8.5	50 mm nominal bore	3	each	1026.65	3080.00
16.8.6	65 mm nominal bore	3	each	1742.15	5226.00
16.8.7	80 mm nominal bore	2	each	2604.55	5209.00
16.9	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
16.9.1	15 mm nominal bore	5	each	406.85	2034.00
16.9.2	20 mm nominal bore	5	each	462.50	2313.00
16.9.3	25 mm nominal bore	5	each	464.05	2320.00
16.1	Providing and fixing uplasticised PVC connection pipe with brass unions :				
16.10.1	45 cm length				
16.10.1	15 mm nominal bore	10	each	97.75	978.00
16.11	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in reinforced cement concrete slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
16.11.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	5	each	1992.60	9963.00
16.12	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
16.12.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	2	each	10862.40	21725.00

16.13	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :				
16.13.1	15 mm diameter pipe	10	metre	154.45	1545.00
16.13.2	25 mm diameter pipe	10	metre	160.70	1607.00
16.13.3	32 mm diameter pipe	10	metre	164.90	1649.00
16.13.4	40 mm diameter pipe	10	metre	167.00	1670.00
16.14	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
16.14.1	15 mm nominal bore	5	each	318.35	1592.00
16.14.2	20 mm nominal bore	2	each	346.80	694.00
16.14.3	25 mm nominal bore	2	each	439.25	879.00
16.14.4	32 mm nominal bore	2	each	489.05	978.00
16.14.5	40 mm nominal bore	2	each	631.30	1263.00
16.14.6	50 mm nominal bore	2	each	823.80	1648.00
16.15	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
16.15.1	15 mm nominal bore	5	each	829.45	4147.00
16.15.2	20 mm nominal bore	5	each	857.85	4289.00
16.15.3	25 mm nominal bore	5	each	950.35	4752.00
16.15.4	32 mm nominal bore	5	each	1000.15	5001.00
16.15.5	40 mm nominal bore	5	each	1142.40	5712.00
16.15.6	50 mm nominal bore	3	each	1520.80	4562.00
16.15.7	65 mm nominal bore	2	each	1833.75	3668.00
16.16	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	5000	per litre	11.00	55000.00
16.17	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI : 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support Including fittings & fixtures for tank shall be paid separately.	1000	per litre	11.00	11000.00
16.18	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
16.18.1	15 mm nominal bore	5	each	506.80	2534.00
16.19	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
16.19.1	15 mm nominal bore	5	each	820.70	4104.00
16.2	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
16.20.1	15 mm nominal bore	5	each	798.95	3995.00
16.21	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
16.21.1	15 mm nominal bore	5	each	670.45	3352.00

16.22	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
16.22.1	15 mm nominal bore	5	each	574.30	2872.00
16.23	Providing and fixing C.P. Brass extension nipple (size 15 mm x 50 mm) of approved make and quality as per direction of Engineer-in-charge.	5	each	74.80	374.00
16.24	Cutting holes up to 30x30 cm in walls including making good the same:				
16.24.1	With common burnt clay F.P.S. (non modular) bricks	5	each	416.80	2084.00
16.25	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	5	each	452.00	2260.00
16.26	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	5	metre	202.90	1015.00
16.27	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	2	metre	209.20	418.00
	Sub-Total				344178.00
17	DRAINAGE				
17.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
17.1.1	100 mm diameter	10	metre	443.60	4436.00
17.1.2	150 mm diameter	10	metre	695.80	6958.00
17.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				
17.2.1	100 mm diameter S.W. pipe	10	metre	458.50	4585.00
17.2.2	150 mm diameter S.W. pipe	10	metre	743.10	7431.00
17.3	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:				
17.3.1	100x100 mm size P type				
17.3.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5	each	2707.65	13538.00
17.3.2	150 x 100 mm size P type				
17.3.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5	each	2734.20	13671.00
17.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps :				
17.4.1	100 mm diameter	5	metre	89.00	445.00
17.4.2	150 mm diameter	5	metre	98.45	492.00

17.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
17.5.1	250 mm dia. R.C.C. pipe	5	metre	899.80	4499.00
17.5.2	300 mm dia. R.C.C. pipe	5	metre	994.30	4972.00
17.6	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
17.6.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
17.6.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	each	12770.55	38312.00
17.6.2	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
17.6.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	each	26405.50	79217.00
17.7	Extra for depth for manholes :				
17.7.1	Size 90x80 cm				
17.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	metre	8825.40	26476.00
17.7.2	Size 120x90 cm				
17.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	metre	10585.50	31757.00
17.8	Making connection of drain or sewer line with existing manhole 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 :				
17.8.1	For pipes 100 to 250 mm diameter	3	each	810.45	2431.00
17.8.2	For pipes 250 to 300 mm diameter	3	each	922.40	2767.00
17.9	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge:				
17.9.1	Rectangular manhole 90x80 cm and 45 cm deep	3	each	2540.85	7623.00
17.9.2	Rectangular manhole 120x90 cm and 90 cm deep	3	each	4475.50	13427.00

17.1	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately) :				
17.10.1	Rectangular manhole 90x80 cm with rectangular cover 600 x 450 mm of grade LD - 2.5	5	each	2625.50	13128.00
17.10.2	Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10	5	each	4168.05	20840.00
17.11	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
17.11.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	each	5957.90	17874.00
17.12	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design :				
17.12.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	each	6889.80	20669.00
	Sub-Total				335548.00
18	ALUMINIUM WORK				
18.1	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) :				
18.1.1	For fixed portion				
18.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	50	kg	495.05	24753.00
18.1.1.1	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	30	kg	539.85	16196.00
18.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
18.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	50	kg	598.60	29930.00
18.1.2.1	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	30	kg	643.45	19304.00

18.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
18.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	30	sqm	1139.30	34179.00
18.2.2	Pre-laminated particle board with decorative lamination on both sides	30	sqm	1115.40	33462.00
18.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
18.3.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	20	sqm	1505.25	30105.00
18.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer- in-charge.				
18.4.1	With stainless steel cover plate minimum 1.25 mm thickness	5	each	2823.85	14119.00
18.5	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee/ angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately).	10	kg	817.15	8172.00
18.6	Providing and fixing 6 mm dia. G.I. level adjusting hangers (upto 1200 mm length), fixed to roof slabs by means of ceiling cleats made out of G.I. flat 40x3 mm size 60 mm long and stainless steel expandable dash fastener of 12.5 mm dia and 50 mm long, complete as per direction of Engineer- in-charge.	50	each	82.45	4123.00
18.7	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
18.7.1	Upto 5 mm depth and 5 mm width	30	metre	96.75	2903.00

18.8	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
18.8.1	255 X 19 mm	5	each	387.00	1935.00
18.8.2	355 X 19 mm	5	each	325.80	1629.00
18.9	Providing and fixing Brass 100 mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	5	each	528.85	2644.00
18.1	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge				
18.10.1	Anodized (AC 15) aluminium	10	each	107.90	1079.00
18.10.2	Polyester powder coated minimum thickness 50 micron aluminium	10	each	112.15	1122.00
18.11	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	10	kg	638.35	6384.00
18.12	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	5	sqm	5325.90	26630.00
	Sub-Total				258669.00
19	WATER PROOFING				
19.1	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area. (iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	25	sqm	769.60	19240.00

19.2	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	35	sqm	617.05	21597.00
19.3	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in				
19.3.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	25	sqm	1684.60	42115.00
19.4	Grading roof for water proofing treatment with				
19.4.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	5	cum	8042.30	40212.00
19.4.2	Cement mortar 1:3 (1 cement : 3 coarse sand)	1	cum	16112.10	16112.00

19.5	Providing and mixing integral crystalline admixture for water proofing treatment to RCC structures like basement raft, retaining walls, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc. at the time of transporting of concrete into the drum of the ready-mix truck , using integral crystalline admixture @0.80% (minimum) to the weight of cement content per cubic meter of concrete) or higher as recommended by the manufacturer's specification in reinforced cement concrete at site of work. The material shall meet the requirements as specified in ACI- 212-3R-2010 i.e. by reducing permeability of concrete by more than 90%, compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure. The crystalline admixture shall be capable of self- healing of cracks up to a width of 0.50 mm. The work shall be carried out all complete as per specification and the direction of the Engineer- in-charge. The product performance shall carry guarantee for 10 years against any leakage.	50	kg	388.00	19400.00
19.6	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer- in-Charge.	50	sqm	563.10	28155.00
	Sub-Total				186831.00
20	NEW TECHNOLOGIES AND MATERIALS				
20.1	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge				
20.1.1	50 mm average thickness	10	sqm	256.35	2564.00
20.2	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.				
20.2.1	Bars upto 12 mm diameter	5	metre	8.25	41.00
20.2.2	Bars above 12 mm diameter	25	metre	16.45	411.00

20.3	Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100 mm upto 200 mm in RCC beams, lintels, columns and slabs to introduce steel bars for sunshades/ balconies including fixing the steel bars in position using epoxy resin anchor grout of approved make but excluding the cost of reinforcement, all complete as per direction of Engineer-In-Charge.				
20.3.1	Upto and including 12 mm dia.	50	each	141.20	7060.00
20.4	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer- In-charge complete in all respect.				
20.4.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	40	sqm	141.20	5648.00
20.4.2	Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make	10	sqm	285.20	2852.00
20.5	Providing, mixing and applying SBR polymer (of approved make @ minimum 2% by wt. of cement used) modified plain/reinforced cement concrete for structural members having minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] with specified average thickness. Note: Rates shall be for finished surface area of concrete and shall include the cost of labour, concrete and appropriate approved Super-Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement, bond coat, Shear Keys, centering and shuttering, strutting, propping etc (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument)				
20.5.1	50 mm thick in Grade M25 with cement content not less than 330 kg per cum	5	sqm	569.15	2846.00
20.5.2	75 mm thick in Grade M25 with cement content not less than 330 kg per cum	5	sqm	853.70	4269.00
20.6	Providing, erecting, maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge.				
20.6.1	Wooven PVC cloth	25	sqm	54.25	1356.00
20.7	Cleaning of exposed concrete surface of sticking material including loose and foreign material by sand blasting with coarse sand followed by and including cleaning with oil free air blast as per direction of Engineer in charge.	10	sqm	382.40	3824.00
20.8	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants as approved by Engineer-in-charge.	25	sqm	902.55	22564.00

	Sub-Total				53435.00
21	Minor Civil Maintance Works				
21.1	""Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level. 1:5:10 (1 cement : 5 fine sand : 10 graded Brick aggregate 40 mm nominal size).""	15	Cum	5754.50	86318.00
21.2	"P/F C.P brass towel rod complete with two C.P.brass brackets fixed to wooden cleats with C.P. brass screws of approved quality size of 600 x 20 mm.	3	each	521.80	1565.00
21.3	P/f Homogeneous polyvinyl chloride sheet 1.5mm thick in flooring and skirting approved pattern on a smooth and damp prof base using rubber base adhesive of approved quaility and manufacture like dunlop s758, Fevicol SR 998 or equivalent including rolloing with light wooden roller weight about 5kg. All complete as directed by Engineer-in-charge in approved colour & shade.	50	Sqm	655.60	32780.00
21.4	"Providing and fixing C.P. grating with or without hole for waste pipe for floor/ nahani trap 100 mm dia. weight not less than 100 grams.	10	each	66.90	669.00
21.5	"Cutting rubbing and polishing of old mosaic flooring of dado for rubbing and removal of rubbish i/c one coat of cement slurry for final rubbing and polishing.	10	Sqm	75.60	756.00
21.6	"Providing and fixing C.P flange for C.P bib cock/C.P angle stop cock.	10	Each	33.45	335.00
21.7	"Providing and fixing 15 mm nominal bore C.P. swan neck pillar cock of L&K or approved equivalent make."	10	Each	1284.00	12840.00
21.8	""Providing & Fixing Glass body liquid soap dispenser, Make : Jaquar cat no. ACN-CHR-1135N or approved equivalent make etc. with simple push lever fitted with liquid soap (one time) including cutting and making good the walls, wherever required.""	10	Each	1039.00	10390.00
21.9	Providing and Fixing white vitreous china flat back half stall urinal of size 580x 380 x 350 mm with fittings standard size, C.P. Brass domical waste 32 mm , C.P. Brass spreaders 15 mm , C.P. Connection pipe with Brass union & clamp and C.P Brass Push Cock 15 mm including cutting & making good the wall.	2	Each	6900.00	13800.00
21.1	"Providing and fixing vertical venition blinds vista make dust guard (classic/select)or equivalent. 100 mm wide on windows."	10	Sqm	2284.00	22840.00
21.11	""Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : with Old available Brick Aggregate 1:5:10 (1 cement : 5 fine sand : 10 graded Brick aggregate 40 mm nominal size).""	5	Cum	4493.25	22466.00

21.12	"Providing and fixing CP health faucet Corsa brand or Equivalent (hand shower) for European type WC/ IWC of standard make fixed on existing angle valve etc. Complete."	10	each	970.35	9704.00
21.13	"Providing and fixing of S.S (steel grade 304) sliding door bolt satin S.S. finish of kich make or approved equivalent including the cost of screws and other incidental charges as per the approved sample complete.250x16mm."	5	Each	2520.00	12600.00
21.14	" Providing and fixing Stailless steel grade 316 Door stopper of Kich make or approved equivalent, including the cost of screw and other incidental charges complete."	5	Each	847.50	4238.00
21.15	" Providing and fixing Stailless steel grade 316 Door Lock of Kich make or approved equivalent, including the cost of screw and other incidental charges complete.□"	3	Each	4321.96	12966.00
21.16	"Providing and fixing Stailless steel Tower bolt of Kich/ Golden make or equivalent, including the cost of screws etc. complete all as per direction of Engineer-in-charge. 250x10 mm."	5	Each	1155.20	5776.00
21.17	"P/F on wall face un plasticized PVC molded fittings for un plasticized PVC pipe incl. Jointing with seal ring. Bend 160mm dia."	5	Each	568.00	2840.00
21.18	"Providing and fixing Sun control coloured solar film of GARWARE make on glass panes etc. Complete."	5	Sqm	862.30	4312.00
21.19	"P/F plastic body PVC finish fully automatic """"""""""NO TOUCH""""""""hand drier suitable to operate on 220 volts, single phase 50 Hz A.C power supply and directly plugged to power point size of 240mm * 235 mm 195mm, heater wattage 1800 wthi heater wattage 1800 with fixing on wall complete.□"	5	Each	7938.00	39690.00
21.2	"Replacement of Solerroid valve for uninal / wash basin auto flush includiing removal of old solenoid valve and servicing etc complete." "	2	Each	4463.00	8926.00
21.21	"Repalcement of battery box of Sensor of Urinal/Washbasin Flush for auto flushing system." "	10	Each	562.10	5621.00
21.22	"Replacement of wall concealed Metropole WC flush valve (push type) in existing connection point complete." "	3	Each	4193.60	12581.00
21.23	"Providing and fixing CP. Brass Threeway Swanneck Piller Cock of standerd make (L & K or equivalent make) complete." "	5	Each	1284.00	6420.00

21.24	"Providing and fixing CP Nozzle cock 15 mm dia of approved make. "	5	Each	923.20	4616.00
21.25	"Replacement of urinal flush valve by providing and fixing CP push valve in existing connection point with required finishing etc, complete. "	5	Each	2419.80	12099.00
21.26	"Providing and Fixing C.P. waste 32mm dia for Basin/ Sink. "	10	Each	321.10	3211.00
21.27	"Removal of old PVC floor and proper scrapping, cleaning etc to prepare surface for reflooring as per direction incharge. "	10	Sqm	111.90	1119.00
21.28	"Replacement of battery and servicing of sensor of wash basin flush for battery operated auto flushing system (6volt battery). "	5	Each	1439.40	7197.00
21.29	Providing and fixing aluminium door seal 3 feet long with screw etc.	10	Each	222.75	2228.00
21.3	Repairing of Aluminium glass door with taking out, make alignment and setting of pivot / hinges etc complete.	5	Each	550.00	2750.00
21.31	"Providing and fixing 3 mm thick transparent Acrylic sheet , with suitable screws for Acrylic sheet in ceiling , walls etc. complete (frame work to be paid separately) 3 mm thick transparent Acrylic sheet"	10	Sqm	1983.05	19831.00
21.32	"Replacement of Sensor circuit with plate for battery operated auto flush valve for uninal / wash basin. "	2	Each	6240.20	12480.00
21.33	"Replacement of battery and servicing of battery box for sensor of wash basin flush / urinal flush for battery operated auto flushing system (battery 4*1.5 v) "	10	Each	275.15	2752.00
21.34	"Replacement of Automatic urinal flushing system with Solerroid valve, senser plate etc. all complete for battery operated valve. "	2	Each	9202.15	18404.00
21.35	"Replacement of Automatic No touch sensered water tap for wash basin with Solerroid valve, senser eye etc. all complete for battery operated tap. "	2	Each	11045.20	22090.00

21.36	"P/F homogeneous polyvinyl chloride sheet 2.00 mm thick in flooring and skirting in approved pattern on a smooth and damp proof base using rubber base adhesive of approved quality and manufacturer like Dunlop S-758 , Fevicol SR 998 or equivalent including rolling with light wooden roller weight about 5 kg. All complete as directed by Engineer -in -charge in approved color & shade. □	25	Sqm	721.40	18035.00
21.37	Providing and fixing 8 mm thick toughened glass of approved make & quality in PVC door/ window i/c carriage etc. complete as per direction of Engineer-in -charge.	10	Sqm	3007.00	30070.00
21.38	Providing and fixing on wall face unplasticized Rigid PVC rain water pipe conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion.(i) Single socketed pipes.160 mm Diameter	10	metre	519.98	5200.00
21.39	Providing and fixing on wall face unplasticized - PVC Moulded fitting/ accessories for unplasticized Rigid PVC Rain water pipe conforming to IS 13592 Type A , including jointing with seal ring Conforming to IS 5382 leaving 10 mm gap for thermal expansion Single Tee Without door 160x160x160 mm	10	each	588.00	5880.00
21.4	Providing and fixing on wall face unplasticized - PVC Mulded fitting/ accessories for unplasticized Rigid PVC Rain water pipe conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion shoe (plain) 160mm shoe	10	each	313.00	3130.00
21.41	Providing and fixing unplasticized PVC Pipe clip of approved design to unplasticized- PVC rain water pipes by means pvc plug, screwed with M.S. screws of required length , including drilling the wall etc complete.	10	each	107.00	1070.00
21.42	Providing and fixing Sun control 100% blackout coloured solar film of GARWARE or approved equivalent make & quality complete as per direction of Engineer-in- charge	20	Sqm	1206.00	24120.00
21.43	Repairing of wall crack with premixed ultra- high strength non-shrink cementitious CICO grout - V1/100 mixed with Smartcare repairmax 200 of asian paint in required proportion as per manufacturer specification i/c making the crack/surface suitable for repairing with required T&P etc. complete in all respect as per the direction of Engineer- in-charge	10	Metre	281.00	2810.00
21.44	Providing and fixing Armstrong channelled woodwork G14/G28 perforated panels of width 128 mm, thickness of 15 mm and length 2440 mm made of a high- density plastic 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 direction of the Engineer-in-charge complete.	5	Sqm	6757.00	33785.00

21.45	Providing and fixing EPDM/ noprone rubber gasket approved equivalent make & quality in existing window glasses i/c removing the glass from the window and refixing the same with gasket etc. complete in all respect as per direction of Engineer-in-charge	5	Sqm	114.00	570.00
21.46	Providing and fixing roller blinds Serene of VISTA or approved equivalent make & Quality Complete as per direction of Engineer -in-charge	10	Sqm	3265.00	32650.00
21.47	fixing of available aluminium partition, door / ventilator including necessary filling up to the gap at junction , C.P.brass / stainless / steel screws, all complete as per direction of Engineer-in-charge.	10	Sqm	350.00	3500.00
21.48	Providing kota stone strip of 500- 100 width on the existing kota stone window sill with necessary adhesive i/c cutting the stone in required shape & size,sealing the joint with silicon sealant etc. complete,	50	mtre	227.00	11350.00
21.49	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS 6315, having brand logo embossed on the body / plate with double spring mechanism for frameless glass door make of dorma modle on BTS65 floor spring.	1	each	14262.00	14262.00
21.5	"Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : (a) 15mm nominal bore.	5	each	484.37	2422.00
21.51	"Providing and fixing white vitreous china oval type wash basin of size 550 x 480 with 15mm C.P brass pillar tap, 32mm C.P brass waste of standard pattern.	5	Each	2865.35	14327.00
21.52	"Providing and fixing C.P. pillar cock 15 mm nominal bore (L&K make) for wash basin.	10	Each	853.79	8538.00
21.53	"Brick on edge flooring with old available bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:6 (1cement : 6 coarse sand) "	10	Sqm	613.85	6139.00
21.54	"Providing and fixing C.P waste 40 mm nominal bore for china sink or wash basin (L&K) make.	10	Each	223.60	2236.00
21.55	"Providing and fixing C.P waste 50 mm nominal bore for china sink or wash basin (L&K) make.	10	Each	257.61	2576.00
21.56	"Providing and fixing PVC door silencer with necessary screw etc complete. 75mm"	10	Each	38.40	384.00
21.57	"Providing and fixing PVC door silencer with necessary screw etc complete. 100mm"	10	Each	56.20	562.00
21.58	Providing and fixing CPVC ball valve 32 mm dia i/c all fittings complete of Approved make. For one piece only	5	Each	735.90	3680.00

21.59	Providing and Fixing CPVC ball valve 25 mm dia i/c all fitting of Approved make. For one Piece only.	5	Each	337.20	1686.00
21.6	P/F looking mirror of 5.5 mm thick superior glass of approved quality complete with 12 mm thick of water type ply wood sheet ground 40 mm wide 12 mm thick 1st class teak wood beeding frame of half round fixed to wooden cleats with CP brass screw and washer complete teak wood beading finished with sprits polishing complete.	10	Sqm	3726.15	37262.00
21.61	Providing and fixing 3 mm thick Aluminium composite (ACP) sheet of internal grade, LDPE core with minimum top & bottom aluminium BMT of 0.25 mm confirming to IS: 17682 in paneling in aluminium doors, window shutters, and partition frames with CP brass/ stainless screws etc. complete as per architectural drawing and direction of Engineer-in-Charge.	10	Sqm	2065.00	20650.00
21.62	Providing and fixing 4 mm thick Aluminium composite (ACP) sheet of External grade, LDPE core with minimum top & bottom aluminium BMT of 0.5 mm confirming to IS: 17682 in paneling in aluminium doors, window shutters, and partition frames with CP brass/stainless screws etc. complete as per architectural drawing and direction of Engineer-in-Charge.	10	Sqm	2516.00	25160.00
21.63	Providing and filling of 40 mm to 65 mm wide and deep Polysulphide sealant to expansion joint including providing & fixing backer rod masking tape etc. complete.	20	Mtr	1673.00	33460.00
	Sub-Total				784724.00
	Total				6672822.00
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 6672822 = 6492656				6492656.00
	Say				6492656.00