

**All India Institute of Medical Sciences**  
**Rishikesh-249203**



Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh.

<b>Ref. No.</b>	<b>:</b>	<b>03/SE/Civil/2023-24</b>
<b>Publishing Date</b>	<b>:</b>	<b>17-04-2023 on 2:00 PM</b>
<b>Bid Submission Start Date</b>	<b>:</b>	<b>17-04-2023 on 2:00 PM</b>
<b>Last Date of Bid Submission</b>	<b>:</b>	<b>24-04-2023 on 2:00 PM</b>
<b>Bid Opening</b>	<b>:</b>	<b>25-04-2023 on 2:00 PM</b>

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Name of Work: Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh

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Certified that this bid document contains pages 1 to 52 (One to Fifty Two pages).

Executive Engineer  
AIIMS, Rishikesh

**Tender document may be downloaded from CPPP site <https://eprocure.gov.in>  
NIT may be downloaded from institute's website [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in)**

**AIIMS, Rishikesh****NOTICE INVITING TENDER**

The Executive Engineer, AIIMS Rishikesh on behalf of The Executive Director, AIIMS Rishikesh invites Percentage rate e-tenders from enlisted contractor in the appropriate classes and category **in CPWD, MES, Railway and state government of Uttarakhand (PWD & IRRIGATION Department only)** for the following work: -

NIT No.:- **03/SE/Civil/2023-24**

Name of Work: Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh

Estimated Cost: **Rs. 50,37,721.53**, Earnest money: **Rs.1,00,754.00** in form of **Treasury Challan /Demand draft/Pay order or Banker's Cheque/ Deposit at call Receipt/FDR/Bank guarantee of any scheduled bank against EMD,**

Period of completion: **180 Days**

Last date & time of submission of bids: 24-04-2023 on 2:00 PM

The tender forms and other details can be seen and downloaded from the website [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in) or CPPP site <http://eprocure.gov.in>

**INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING**  
**FORMING PART OF NIT AND TO BE POSTED ON WEBSITE**

The Executive Engineer, AIIMS Rishikesh on behalf of The Executive Director, AIIMS Rishikesh invites Percentage rate e-tenders from enlisted contractor in the appropriate classes and category in CPWD, MES, Railway and state government of Uttarakhand (PWD & IRRIGATION Department only) Contractor for the following work:

Name of work & Location	Estimated cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid	Time & date of opening of bid	Date and time of Submission of EMD in hard form to Executive Engineer
<u>Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh</u>	<b>Rs.50,37,721.53</b>	<b>Rs.1,00,754.00</b>	180 Days	24-04-2023 on 2:00 PM	25-04-2023 on 2:00 PM	<b>Agency can submit EMD in hard form upto one day of last day of submission of Bid</b>

- 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.
- Information and Instructions for bidders posted on website shall form part of bid document.
- The bid document consisting of plans, specifications, 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.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in) or <https://eprocure.gov.in>
- Those contractors not registered on the website mentioned above, are requested to get registered beforehand.
- The intending bidder must have valid class-III digital signature to submit the bid.
- On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- Contractor can upload documents in the form of PDF format only.
- The contractor should quote the rate of item including GST as per statutory rules.
- EMD shall submit in hard form in office of Executive Engineer(Civil) before last date & time of bid. Those who fails to submit the EMD within stipulated date & time, they shall be treated as disqualified from the BID.

11. (i) **The bidder shall pay the respective amount of Bid Security (EMD) as mentioned in table by Demand Draft FD/TD/CD in favour of The Executive Director, AIIMS, Rishikesh drawn on any Nationalized Bank/ Scheduled Bank and payable at Rishikesh and must be valid for (6) six months.** Bids received without Earnest Money deposit (EMD) shall stand rejected and thus shall not be considered for evaluation etc at any stage. The original EMD will be submitted alongwith bid documents.

(ii) Earnest Money deposited with AIIMS, Rishikesh in connection with any other tender enquiry even if for same/similar material / Stores by the tenderer will not be considered against this tender.

(iii) The EMD will be forfeited if the bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to the notice that the information/ documents furnished in its tender is incorrect or false.

12. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract with successful bidder.

11. The successful bidders has to execute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) within fifteen (15) days from the date of award of this tender in his favour and also required to furnish the 3% against performance guarantee of contract value in the form of FD from any Nationalized/Schedule bank duly pledged in favour of AIIMS, Rishikesh & payable at Rishikesh only. If the successful bidder fails to furnish the full Performance guarantee within 15 (fifteen) days after the issue of Letter of Acceptance of Work, action will be taken as per bid declaration form, unless time extension has been granted by AIIMS, Rishikesh.

12. The bid shall be valid and open for acceptance by the competent authority of AIIMS Rishikesh for a period of 90 (ninety) days from the date of opening of the Financial bid and no request for any variation in quoted rates and / withdrawal of tender on any ground by bidders shall be entertained. 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, **Further the bidders shall not be allowed to participate in the re-bidding process of the work & action shall be taken as per undertaking furnished.**

13. **List of Documents to be scanned and uploaded in CPP portal at AIIMS Rishikesh within the period of bid submission, failing which the bid of the tenderer shall be rejected:**

**I. Treasury Challan /Demand draft/Pay order or Banker's Cheque/ Deposit at call Receipt/FDR/Bank guarantee of any scheduled bank against EMD**

**II. Certificate of Registration for GST and acknowledgement of up to date filed return.**

**III. Certificate of work experience issued by the Government department/PSU. (As specified in Clause 1.2.1 of CPWD-6)**

**IV. Valid enlistment certificate of Government department mentioned in the NIT.**

14. **Due to Scarcity of funds payments may get delayed. No interest shall be paid to contractor due to delay in payment. Contractor shall not claim anything extra because of delayed payment.**

CPWD-6

**Govt. of India**  
**AIIMS, Rishikesh**  
**Notice Inviting e-Tender**

The Executive Engineer, AIIMS Rishikesh on behalf of The Executive Director, AIIMS Rishikesh invites Percentage rate e-tenders from enlisted contractor in the appropriate classes and category in CPWD, MES, Railway and state government of Uttarakhand (PWD & IRRIGATION Department only) for the work “Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh.”

- 1.1 The work is estimated to Cost **Rs.50,37,721.53** this estimate, however, is given merely as a rough guide.
- 1.2 Intending tenderer is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below: -

**Criteria of eligibility for submission of bid documents**

**1.2.1 Criteria of eligibility**

Three similar works each of value not less than **Rs. 20,15,089.00** or two similar work each of value not less than **Rs.30,22,633.00** or one similar work of value not less than **Rs.40,30,177.00** in last **7 years** ending last day of the month previous to the one in which the tenders are invited.

**Similar works means Experience of Building construction work.**

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of tenders.

**1.2.2. Certificate of Registration for GST and acknowledgement of up to date filed return.**

**1.2.3. Certificate of work experience issued by the Government department/PSU. (As specified in Clause 1.2.1 of CPWD-6)**

**1.2.4. Valid enlistment certificate of Government department mentioned in the NIT.**

**1.2.5. Treasury Challan /Demand draft/Pay order or Banker’s Cheque/ Deposit at call Receipt/FDR/Bank guarantee of any scheduled bank against EMD**

2. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7 which is available as a Govt. of India Publication and also available on website [www.cpwd.gov.in](http://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.
3. The time allowed for carrying out the work will be **180 Days** 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, if any, indicated in the bid documents.
4. The site for the work is available. The architectural and structural drawings shall be made available as per requirement of the same as per approved programme of completion submitted by the contractor after award of the work.
5. The tender document consisting of plans if any, specifications, 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 except Standard

General Conditions Of Contract Form can be seen from website [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in) or <https://eprocure.gov.in> .

The bid submitted shall be opened on 25-04-2023 on 2:00 PM

6. The contractor whose bid is accepted will be required to furnish performance guarantee of 3 (Three Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs. 1, 00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. 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 Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. **The Earnest Money deposited along with tender shall be returned after receiving the aforesaid performance guarantee.**
7. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders 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, 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. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders 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 local conditions and other factors having a bearing on the execution of the work.
8. The competent authority 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 the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
9. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
10. The competent authority reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
11. The contractor shall not be permitted to tender for works in AIIMS Rishikesh in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Executive Engineer and Junior Engineer (both inclusive). 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 gazette officer in AIIMS Rishikesh. Any breach of this condition by the contractor would render him liable to reject his Bid submitted by him.
12. This notice inviting Bid shall form a part of the contract document. The successful bidders /contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of: -
- The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender.
  - Standard C.P.W.D. Form 7 or General condition of contract for C.P.W.D Maintenance work 2020 with up to date correction slips.

**INTEGRITY PACT**

To,

Sub: **03/SE/Civil/2023-24** Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh

Dear Sir,

It is here by declared that AIIMS Rishikesh is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender / bid documents, failing which the tenderer / bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the AIIMS Rishikesh.

Yours faithfully,

Executive Engineer  
AIIMS Rishikesh



To,

The Executive Engineer,  
AIIMS Rishikesh,

Sub: Submission of Tender for the work of Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh

Dear Sir,

I / We acknowledge that AIIMS Rishikesh is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I / We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that **THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE** of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by AIIMS Rishikesh. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, AIIMS Rishikesh shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

**(Duly authorized signatory of the Bidder)**

**To be signed by the bidder and same signatory competent / authorised to sign the relevant contract on behalf of The Executive Director AIIMS Rishikesh.**

## INTEGRITY AGREEMENT

This Integrity Agreement is made at..... on this.....day of.....20

### BETWEEN

AIIMS Rishikesh represented through The Executive Director.....

(Name of Division)

AIIMS Rishikesh....., (Hereinafter referred as the

(Address of Division)

'Principal / Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### AND

(Name and Address of the Individual/firm/Company)

Through..... (hereinafter referred to as the

(Details of duly authorized signatory)

“Bidder/Contractor” and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### Preamble

WHEREAS the Principal /Owner has floated the Tender (NIT No.

..... ) (hereinafter referred to as “Tender/Bid”) and intends to award, under laid down organizational procedure, contract for

(Name of work)

Hereinafter referred to as the “Contract”.

AND WHEREAS the Principal / Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as “Integrity Pact” or “Pact”), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

### **Article 1: Commitment of the Principal / Owner**

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) The Principal / Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
  
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC) / Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal / Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### **Article 2: Commitment of the Bidder (s) / Contractor (s)**

- 1) It is required that each Bidder / Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
  
- 2) The Bidder(s) / Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal / Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s) / Contractor (s) will not enter with other Bidder (s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

- c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s) / Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s)/ Contractor(s) of foreign origin shall disclose the names and addresses of agents / representatives in India, if any. Similarly, Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- d) The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose (with each tender as per performa enclosed) any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract
- 3) The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a willful misrepresentation or omission of facts or submission of fake / forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**
- 5) The Bidder(s) / Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his / her reputation or property to influence their participation in the tendering process).

### **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal / Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder / Contractor accepts and undertakes to respect and uphold the Principal / Owner's absolute right:

- 1) If the Bidder (s) / Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the

exclusion will be determined by the severity of transgression and determined by the Principal / Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**

2) **Forfeiture of EMD/Performance Guarantee / Deposit:**

If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder / Contractor.

3) **Criminal Liability:**

If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of Indian Penal code (IPC)/Prevention of Corruption Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

**Article 4: Previous Transgression**

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holding listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

**Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors**

- 1) The Bidder(s) / Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder / Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2) The Principal / Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal / Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

**Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor / Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, The Executive Director, AIIMS Rishikesh.

#### **Article 7- Other Provisions**

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Division** of the Principal / Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this **Integrity Agreement/ Pact or interpretation** there of shall not be subject to arbitration.

#### **Article 8- LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender / Contract documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner)

(For and on behalf of Bidder/Contractor)

WITNESSES:

1. . ..... (Signature, name and address)

2. . ..... (Signature, name and address)

Place: -

Dated: -

## निविदा TENDER

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, Conditions of Contract, 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 within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

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

A sum of ₹ **1,00,754.00** is hereby forwarded in Multiple Treasury Challan or Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt / Fixed Deposit receipts of a scheduled bank / demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money. If I/We fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said Director of AIIMS Rishikesh or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that Director of AIIMS Rishikesh or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely. The said Performance Guarantee shall be 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 Clause 12.2 and 12.3 of the tender form. **Further, I/we agree that in case of forfeiture of earnest money or both earnest money and 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 AIIMS Rishikesh, then I/We shall be debarred for tendering in AIIMS Rishikesh in future forever. Also, if such a violation comes to the notice of Department before date of start of work, The Engineer – in – Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.

मैं/हम एतद्वारा घोषणा करते हैं कि मैं/हम निविदा कागजातों, नक्शों और कार्य से संबंधित अन्य अभिलेखों को गुप्त/गोपनीय कागजात के रूप में रखेंगे और उनसे प्राप्त/ली गई जानकारी किसी अन्य को, जिन्हें मैं/हम सूचित करने के लिए प्राधिकृत हो, से भिन्न किसी को, नहीं बताएंगे या जानकारी को किसी ऐसे रूप में प्रयोग नहीं करेंगे जो राज्य की सुरक्षा के लिए प्रतिकूल हो।

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 therefrom to any person other than a person to whom I/We am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the State.

तारीख Dated #.....

ठेकेदार के हस्ताक्षर Signature of Contractor#

डाक का पता Postal Address#

साक्षी Witness : #

पता Address: #

उपजीविका Occupation: #

# To be filled in by the contractor/witness as applicable



**ACCEPTANCE**

The above tender (as modified vide letters mentioned hereunder) is accepted by me for and on behalf of The Executive Director, AIIMS Rishikesh for a sum of ₹. \_\_\_\_\_

(Rupees \_\_\_\_\_)

The letters referred to below shall form part of this contract Agreement: -

- a)
- b)
- c)

For & on behalf of The Executive Director, AIIMS  
Rishikesh

Signature.....

तारीख Dated ..... ..

Designation.....



कार्य के लिए विशेष अपेक्षाएं/दस्तावेज, यदि कोई हों, की अतिरिक्त अनुसूची  
Extra schedule for specific requirements/documents for the work, if any. -----Nil-----

**अनुसूची (ड) SCHEDULE 'E'**

टेके की सामान्य शर्तों का संदर्भ  
1. Reference to General Conditions of contract  
General conditions of contract for CPWD works 2020 (maintenance work) as amended upto date.

Name of work - Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh

कार्य की अनुमानित लागत Estimated cost of work  
(i) धरोहर राशि Earnest money  
(ii) निष्पादन गारंटी Performance guarantee :  
(iii) प्रतिभूति निक्षेप: Security Deposit:

: ₹ **Rs.50,37,721.53**  
: **Rs. 1,00,754.00**  
3% of Tendered value. निविदित मूल्य का 03 प्रतिशत  
2.5% of tendered value

**अनुसूची 'च' SCHEDULE 'F'**

सामान्य नियम एवं दिशानिर्देश:  
**General Rules & Directions:**  
निविदा आमंत्रण करने वाला प्राधिकारी  
Officer inviting tender -  
कार्य की मर्दों की मात्रा के लिए अधिकतम प्रतिशत जिससे अधिक निष्पादित मर्दों के लिए दरों का निर्धारण खण्ड 12.2 और 12.3 के अनुसार होगा  
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3.  
Definitions:  
2(v) भारसाधक इंजीनियर  
Engineer-in-Charge  
2(viii) स्वीकार कर्ता प्राधिकारी  
Accepting Authority  
2(x) अतिरिक्त और लाभों को पूरा करने के लिए श्रम एवं सामग्रियों की लागत पर प्रतिशतता  
Percentage on cost of materials and labour to cover all overheads and profits.  
2(xi) दरों की मानक अनुसूची  
Standard schedule of Rates for Civil: -  
**Rate**  
2(xii) विभाग  
Department  
9(ii) मानक के.लो.नि.वि. टेका फार्म  
Standard CPWD contract Form

**Executive Engineer , AIIMS Rishikesh**  
निम्नानुसार  
see below  
**Executive Engineer, AIIMS Rishikesh**  
**Superintending Engineer, AIIMS Rishikesh**  
**15% (Fifteen per cent)**  
**Delhi Schedule of rate 2021(Civil)/Market**  
**Issued upto date of receipt of tender.**  
**AIIMS Rishikesh**  
**CPWD form7 GCC 2020Maintenance work with up to date correction slip.**

**खण्ड Clause 1**

:पद्ध स्वीकृति पत्र जारी होने की तारीख से निष्पादन गारंटी के प्रस्तुतीकरण के लिए अनुमत समय  
Time allowed for submission of performance guarantee from the date of issue of letter of acceptance : 10 days

:पद्ध (उपर्युक्त प) में दी गई अवधि के पश्चात् अधिकतम अनुमेय एक्सटेंशन  
Maximum allowable extension with late fee @ 0.10% per day of performance guarantee amount beyond the period as provided in (i) above : 1 to 07 days

**खण्ड Clause 2**

खण्ड 2 के तहत प्रतिकार निश्चित करने वाला प्राधिकारी  
Authority for fixing compensation under clause 2

**Superintending Engineer, AIIMS Rishikesh**

**खण्ड Clause 2A**

क्या खण्ड 2 क लागू होगा  
Whether clause 2A shall be applicable

**No**

**खण्ड Clause 5**

कार्य आरंभ की तारीख की गणना के लिए स्वीकृति पत्र के जारी होने की तारीख से दिनों की संख्या  
No. of days from the date of issue of letter of acceptance for reckoning date of start

**10 days.**

लक्ष्य नीचे दी गई सारणी के अनुसार

**Milestone(s): -**

**NA**

कार्य निष्पादित करने के लिए अनुमत समय  
Time allowed for execution of work  
Authority to decide  
(i) Extension of Time

**180 (One Hundred Eighty) Days**

**Superintending Engineer, AIIMS Rishikesh**

(ii) Rescheduling of mile stones

**Superintending Engineer, AIIMS Rishikesh.**

(iii) Shifting of date of start in case of delay in handing over of site

**Executive Engineer , AIIMS Rishikesh**

**खण्ड Clause 7**

अंतरिम भुगतान के लिए पात्र होने के लिए अंतिम ऐसे भुगतान के बाद कुल भुगतान एकत्रित सामग्रियों के अग्रिमों के समायोजन सहित किया जाने वाला कुल कार्य  
Gross work to be done together with net payment/adjustment of advances for material collected, if any since the last such payment for being eligible to interim payment

**Rs.5.0 Lakhs**

**खण्ड 10 d Clause10A**

कार्यस्थल प्रयोगशाला में टेकेदार द्वारा उपलब्ध कराये जाने परीक्षण उपकरण की सूची  
List of testing equipment to be provided by the contractor at site lab.

**N.A.**

**खण्ड Clause10B(ii)**

क्या खण्ड 10 ख ;पद्ध लागू होगा  
Whether clause 10B (ii) shall be applicable

**NA**

**खण्ड Clause10C**

Component of labour expressed as Percent of value of work

**NA**

**खण्ड Clause 10CC - NOT APPLICABLE.**

खण्ड 10 गग उन सविदाओं पर लागू होगा जिसमें कार्य समापन की अवधि, अगले कालम में दर्शाई गई अवधि से अधिक अनुबंधित है।

Clause 10CC to be applicable in case of **DELETE** with stipulated period of compensation exceeding the period shown in next column : ..... Months

**खण्ड Clause 10d****Yes****खण्ड Clause 11**

कार्य निष्पादन के लिए अनुपालन  
Specifications to be followed for execution of work

**For Civil : CPWD specification 2019, Volume-I & II  
with correction slips upto date of receipt of tender.**

**खण्ड Clause 12****Applicable**

12.2 &amp; 12.3

विचलन सीमा जिसके परे खण्ड 12.2 तथा 12.3 भवन निर्माण कार्य के लिए लागू होंगे  
Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work (Other than foundation)

**50%**

12.5

(i) Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except earth work)

**50%**

(ii) Deviation limit for items in earth work subhead of DSR or related items

**100%****खण्ड Clause 16**

घटी हुई दरें निर्धारित करने की लिए सक्षम प्राधिकारी  
Competent Authority for deciding reduced rates

**Superintending Engineer, AIIMS Rishikesh****खण्ड Clause 18**

कार्यस्थल पर ठेकेदार द्वारा लगाये जाने वाली अनिवार्य मशीनरी औजार एवं सयंत्रों की सूची :-  
List of mandatory machines, tools and plants to be deployed by the contractor at site.

**N.A.****खण्ड Clause 31**

Whether clause 31 shall be applicable

**Yes****खण्ड Clause 32 Rs.15000 (minimum salary of engineer)**

Sr No.	Minimum qualification of technical representative	Discipline	Designation (Principal Technical / Technical representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
						Figures	Words
1	Diploma/ Graduate Engineer	Civil	Engineer	1 year	1	Rs.15000.00	Fifteen Thousand only

**खण्ड Clause 38**

I) क) सीमेन्ट और बिटुमन की अनुमानमूल मात्रा निर्धारित करने के लिए अनुसूची/विवरण

केलोनवि द्वारा मुद्रित दिल्ली दर अनुसूची 2018 के आधार पर

I) (a) Schedule/statement for determining theoretical quantity of cement &

on the basis of Delhi Schedule of Rates 2018 printed by C.P.W.D. with correctionslips

	bitumen	issued up to date of receipt of tender.
II)	अनुमानमूलक मात्राओं में अनुमत्य विचलन Variations permissible on theoretical quantities.	<b>Yes</b>
II)	अनुमानमूलक मात्राओं में अनुमत्य विचलन Variations permissible on theoretical quantities.	<b>Yes</b>
d½	सीमेन्ट जिन कार्यों के लिए निविदा में अनुमानित मूल्य रु. 5 लाख से अधिक न हो	
a)	Cement for works with estimated cost put to tender not more than Rs. 5 lakhs	Not Applicable
	जिन कार्यों के लिए निविदामें अनुमानित मूल्य रु. 5 लाख से अधिक हो	2 प्रतिशत जमा/घटा
	for works with estimated cost put to tender more than Rs. 5 lakhs	2 % plus/minus.
ख़ा)	बिटुमन सभी कार्यों के लिए	2.5 प्रतिशत केवल जमा और घटा के पक्ष में शून्य
b)	Bitumen for all works	2.5% plus only & Nil on minus side.
ग)	इस्पात प्रत्येक व्यास, कोट और श्रेणी के लिए पूनर्वलन और संरचनात्मक इस्पात काट	2 प्रतिशत जमा/घटा
c)	Steel Reinforcement and structural steel sections for each diameter, section and category.	2% plus/minus
घ)	सभी अन्य सामग्रियां	शून्य
d)	All other materials	Nil.

अनुमत्य विचलन से अधिक की मात्राओं के लिए वसूली दर

**RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION**

क्रम सं. SI No.	मद विवरण Description of item	अंको और शब्दों में वह दर जिस पर ठेकेदार से वसूली की जाएगी Rates in figures and words at which recovery shall be made from the Contractor	
		अनुमत्य विचलन से अधिक आधिक्य Excess beyond permissible variation	अनुमत्य विचलन से अधिक उपयोग घटाया Less use beyond the permissible variation
1.	सीमेन्ट Cement	N.A.	<b>Rs. 6210/- Per MT</b>
2.	ईस्पात Steel Reinforcement	N.A.	<b>Rs. 53099/- Per M.T.</b>

**FORM OF EARNEST MONEY (BANK GUARANTEE)**

WHEREAS, contractor ..... (Name of contractor) (Hereinafter called "the contractor") has submitted his tender dated ..... (date) for the construction of (name of work) (hereinafter called "the Tender")

KNOW ALL PEOPLE by these presents that we ..... (name of bank) having our registered office at ..... (hereinafter called "the Bank") are bound unto ..... (Name and division of Executive Engineer) (hereinafter called "the Engineer-in-Charge") in the sum of Rs. .... (Rs. in words ..... ) for which payment well and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this ..... day of ..... 20... .

THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
  - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required; OR
  - (b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR
  - (c) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR
  - (d) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date. \* after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE

SIGNATURE OF THE BANK

WITNESS

SEAL

(SIGNATURE, NAME AND ADDRESS)

\*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

**PARTICULAR SPECIFICATIONS**  
**&**  
**SPECIAL CONDITIONS**

**1. GENERAL**

- 1.1 Wherever any reference to any Indian Standard Specifications of BIS occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued there-to or revisions thereof, if any, up to the date of receipt of tenders.
- 1.2 The contractor shall work according to the programme of work as approved by the Engineer-in-charge, for which purpose, the contractor shall submit a programme of the work within 15 days from the stipulated date of start of the work.
- 1.3 The contractor shall take instructions from the Engineer-in-charge for stacking of materials at site. No excavated earth or building materials shall be stacked on areas where the buildings, roads, services or compound walls are to be constructed.
- 1.5 Unless otherwise provided in the Schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing shall be payable to him on this account.
- 1.6 The working drawings appearing at para 8.1(iii) of conditions of contract in the form CPWD-8, shall mean to include both architectural and structural drawings respectively. The structural and architectural drawings shall be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing of the Engineer-in-charge shall be obtained by the contractor before proceeding further.
- 1.7 Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restriction / instructions including issue of identity cards to all persons authorized by him to do work / visit the work site and nothing shall be payable on this account.
- 1.8 The contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the department concerned.
- 1.9 The contractor shall conduct his 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 contractors, 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 Engineer-in-Charge. The contractor shall be responsible for any damage due to hindrance caused by him.
- 1.10 All the material related to the work execution shall be approved by Engineer-In-charge.
- 1.11 Any cement slurry added over base surface for bond or for continuation of concreting, for protecting reinforcement bars, its cost shall be deemed to have been included in the respective items, unless specified otherwise and nothing extra shall be payable nor extra cement shall be considered in the cement consumption on this account.
- 1.12 Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth if required at any stage shall have to be done by the contractor at his own cost.
- 1.13 No claim for idle establishment & labour, machinery & equipments, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.
- 1.14 Only Stainless Steel screws shall be used unless otherwise specified.



- 1.15 **Work shall be carried out in professional manner with finished product serving the intended purpose with specified strength, durability and aesthetics.**
- 1.16 Work activities shall be executed in well thought out sequences such that consequent activities not adversely affecting previously done work. Nothing extra shall be payable to protect the works already done.
- 1.17 The contractor shall prepare all the needed shop drawings well in advance and get them approved before placing the order and execution of the item.
- 1.18 Contractor shall be able to claim bill only after issuing site clearance certificate from Junior Engineer & Assistant Engineer.
- 1.19 Contractor shall submit all material in store which is to be consumed according to specifications during execution of work. It will be further issued by concerned JE and AE according to daily requirement.
- 1.20 All materials to be used during work shall be got approved from engineer in charge.
- 1.21 All samples of material shall be got approved from engineer in charge before execution of work.
- 1.22 The contractor(s) shall inspect the site of work before tendering and acquaint himself with the site conditions and **no claim on this account** shall be entertained by the department.
- 1.23 The tender shall see the approaches to the site. In case any approach from main road is required at 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.
- 1.24 Contractor shall take all precautionary measures to avoid any damage to adjoining property. **All necessary arrangement shall be made at his own cost.** Any damage caused by the contractor to the contractor to existing building/ installation / roads / boundary walls shall be made good by him (the contractor) at his own cost.
- 1.25 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution board day and night, speed limit, red flags, red lights and proving barriers. He shall be responsible for all damages and accidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic, running of hospital services during the execution of the work.
- 1.26 Royalty at the prevailing rates whenever payable shall have to be paid by the contractor on the boulders, metal, shingle, sand and bajri etc. Or any other material collected by him for the work direct to revenue authorities and **the department shall pay nothing extra for the same.**
- 1.27 The contractor shall provide at his own cost suitable weighing, surveying and levelling and measuring arrangements as may be necessary at site for checking. All such equipment shall be got calibrated in advance from laboratory, approved by the Engineer-In-Charge. **Nothing extra shall be payable on this account.**
- 1.28 Contractor shall provide permanent bench mark, flags tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the level and location, given in the Architectural and plumbing drawings.
- 1.29 Water tanks, taps, sanitary, water supply and drainage pipes, civil fittings and accessories should confirm to byelaws and municipal body / corporation where CPWD specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixture /fittings) tested by municipal Body / Corporation authorities wherever required at his own cost.
- 1.30 The contractor shall give performance test of the entire installations as per the standing specifications before the work is finally accepted and completion certificate is recorded by the Engineer- In -Charge. **Nothing extra whatsoever shall be payable to the contractor for the test.**
- 1.31 Any cement slurry added over base surface for the continuation of concreting for better bond is deemed to have been included in the items and **nothing extra shall be payable on this account, also the cement consumed on this account shall not be considered in theoretical consumption.**

**For RCC work, only factory made round type cover block shall be used.**

- 1.32 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials bought to site.
- 1.33 The work shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time, by the Engineer-In-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the and satisfy himself that the information available there from is complete and unambiguous.  
**The discrepancy, if any, shall be brought to the notice of the Engineer-In-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of the work on the basis of any erroneous and or incomplete information.**
- 1.34 Other agencies will also simultaneously execute and install the works of internal electrical installations, sub- station / generating sets, air- conditioning, lifts, etc. for the work 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 supplied free of cost by the department unless otherwise specifically mentioned) 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.**
- 1.35 All materials obtained from Govt. stores or otherwise shall be got checked by the Engineer-In-Charge or his any authorized supervisory staff on receipt of the same at site before use.
- 1.36 All material shall only be brought at site as per programme 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.
- 1.37 The architectural drawings given in the tender other than those indicated in nomenclature of the items are only indicative of the nature of the work and materials / fixtures involved unless otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-In –Charge. Architectural drawings are available in the office of Engineer-In-Charge and can be seen.
- 1.38 Normally contractors shall not be allowed to work at night. Work at night shall, however, be allowed if the site conditions / circumstances at night, **no claim on this account shall be entertained. In such situations the contractor shall make available to the department proper means of transport such as vehicle at his own cost.**
- 1.39 Existing drains, cables, pipes, over-head wires, sewer lines and similar services encountered in the course of execution of work shall be protected against the damage by the contractor's own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In no case such services should be stopped to the existing buildings.
- 1.40 The contractor shall be responsible for the watch and ward/ guard of the buildings, safety of all fitting 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.**
- 1.41 The day to day receipt and issue accounts of different / brands of cement shall be maintained separately in the standard Performa by the Jr. Engineer of work and which shall be duly signed by the contractor or his authorized representative.
- 1.42 The contractor shall be fully responsible for the safe custody of materials brought by him issued to even though the materials are under double lock key system.
- 1.43 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and clearance of the same before use in the work. Any predelivery of the materials not required for immediate consumption shall not be resorted to. The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of work.

- 1.44 No payment shall be made to the contractor for any damage caused by rain, floods, earthquake or any other natural causes whatsoever during execution of work. The contractor at his own cost will make the damages to the work good and no claim on this account shall be entertained.
- 1.45 For construction works which are likely to generate malba / rubbish to the tune of more than a truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and **wastes at his own cost** to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.
- 1.46 Any damage done by the contractor to any existing work or work being executed by other agencies shall be made good by him at his own cost.
- 1.47 On the account of security consideration, there would be some restrictions, on the working hours, movement of vehicle for transportation of material and location of labour camp. The contractor shall be bound to follow all such restrictions and adjust the programme for execution of work.
- 1.48 The contractor shall also be required to follow the rules & restrictions imposed on working / movement/ stacking of materials by the local competent authority at all times. Nothing extra shall be payable on this account.
- 1.49 In case, there is any discrepancy between English version and corresponding Hindi version, if provided, then the provisions in English version will prevail.
- 1.50 The contractor will have to work as per schedule given by the Engineer-In-Charge.
- 1.51 The contractor shall remove all splashes from doors, windows and floors etc. if the contractor fails to remove the same 10% of gross value of the bills would be kept in deposit from each bill simultaneously.
- 1.52 The contractor submits the authenticated copies of itemized bills of the material which has to be entered in the M.A.S. Register viz steel, Cement, Bitumen, Paint water proofing material or any other item suggested by the technical sanction authority before settling payment.
- 1.53 The contractor shall pump the concrete wherever necessary to expedite the progress of work. **Nothing extra shall be paid on this account.**
- 1.54 Sample of building material, fitting and other articles required for execution of work shall be got approved from the Engineer-In-Charge before use in the work. The quantity of samples brought by the contractor shall be judge by standards laid down in the relevant BIS specification.
- 1.55 All material and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-In-Charge which shall be preserve till the completion of work. If a particular brand of material is specified in the item of work in schedule of quantity, the same shall be used after getting the same approved from Engineer-In-Charge. Wherever brand/quality of material is not specified in the items of work, the contractor shall submit the samples as per suggestive list of brand name given in the tender document /particular specifications for approval of Engineer-In-Charge. For all other items, materials and fitting carrying BIS mark shall be used with approval of Engineer-In-Charge. Wherever BIS marked material / fittings are not available, the contractor shall submit samples of material/fittings manufactured by firm of repute conforming to relevant specification or IS codes and use the same only after getting the approval of Engineer-In-Charge. To avoid delay, contractor should submit samples as stated above well in advance so as to give timely order for procurement. If any material, even though approved by Engineer-In-Charge is found defective or not conforming to specifications shall be replaced/removed by the contractor at his own risk and cost.
- 1.56 The contractor shall ensure quality construction in a planned and time in bound manner. Any sub-standard material/work beyond set-out tolerance limit shall be summarily rejected by the Engineer-In-Charge& contractor shall be bound to replace/ remove such sub-standard/defective work immediately.
- 1.57 BIS marked items (except cement and steel) required on the work shall be got tested. Only important tests shall be carried out. The frequency of such tests shall be 25% of the frequency specified in the CPWD specifications 2009 Vol. I to II with up to date correction slips. for certain items, if the frequency of test is not mentioned in CPWD specifications then relevant IS code shall be followed and tests shall be carried out @25% of frequency specified therein.

- 1.58 BIS marked materials except otherwise specified shall be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall furnish manufacturer's 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.
- 1.59 Sample for testing –The contractor shall provide samples of materials required for testing free of charge. The cost of test shall be borne by the contractor / department in the manner indicate below: -
- (a) By the contractor, if the results show that the material does not conform to relevant specifications.
  - (b) By the department, if the result show that the material conforms to relevant specifications. **All other expenditure required to be incurred for talking samples, conveyance, packing etc. shall be borne by the contractor himself.**
- 1.60 However, if any load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.
- 1.61 All necessary tests as per the NIT/CPWD specifications/ relevant BIS codes shall be carried out on all the materials whether ISI marked or otherwise. Wherever NIT/CPWD specifications/relevant BIS Codes do not specify the frequency of tests, the same shall be carried out as per the directions of the engineer –in-charge. Nothing extra whatsoever shall be payable on this account.
- 1.62 The contractor shall ensure quality control measures on different aspects of construction methodologies to be adopted.
- 1.63 Lists of approved makes and brand of materials for civil works and sanitary works are annexed hereto. Makes and brands of materials specified therein shall only be used on the work. The contractor shall submit brand/ make of various materials to be used for the approval of Engineer-In-Charge along with samples.
- 1.64 **All material shall be brought as per programme 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.**
- 1.65 Samples including brand/quality of materials and fitting to be used in the work shall be got approved from the Engineer-In-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 1.66 The rates for all items of work shall, unless clearly specified otherwise, include cost of all labor, material, tools, and plants and other inputs involved in the execution of the items and **nothing extra shall be payable on this account.**
- 1.67 The contractor shall quote all-inclusive rates against the items in the schedule of quantities and **nothing extra shall be payable for any of the conditions and specifications** mentioned in the tender document unless specially specified otherwise.
- 1.68 Unless otherwise specified in the schedule of quantities, the rates for all items, shall be considered as inclusive of pumping / bailing out water wherever necessary for which **no extra payment shall be made.**
- 1.69 The rate for all items, in which the use of cement is involved is inclusive of charges for curing.
- 1.70 The foundation trenches shall be kept free from water work below ground level are in progress.
- 1.71 The contractor shall indemnify the Govt. against any claims or obligation rising out of any damage to adjacent property, structure or to building work done by him.
- 1.72 In case service are encountered during excavation /earth work and such services are required to be shifted, the contractor is bound to carry out the shifting operation as per guidance/ instructions and with the approval of the Engineer-In-Charge. However, necessary payments shall be made in this regard as per provision of the agreement.
- 1.73 Many other agencies would be executing work simultaneously at site. The contractor shall maintain proper co-ordination with other agencies in maintaining progress of work. In case of any dispute, the decision of the Engineer-In-Charge shall be final and binding.
- 1.74 **LABOUR CESS @ 1% OF THE GROSS VALUE OF THE WORK DONE WIL BE DEDUCTED FROM EACH RUNNING & FINAL BIL AS PER GOVT. NOTIFICATION.**

- 1.75 **RECOVERY FOR WATER @ 1% OF THE GROSS VALUE OF WORK DONE SHALL BE MADE FROM THE BILL.**
- 1.76 **THE CONTRACTOR COMPLIES WITH THE INSTRUCTION CONTAINED TO DPCC ORDER FOLLOWS:-**
- (a) The dismantle material /building rubbish received from dismantling/demolishing shall be dumped to the dumping ground in properly covered truck with precaution.
- 1.77 The agency has to deposit 50% of paint material before the start of work at site calculated as per theoretical consumption calculated.

## **2.0 CONDITION FOR CEMENT: -**

- 2.1 The Contractor shall procure 43 grade Ordinary Portland cement (conforming to IS : 8112) or Portland slag cement (conforming to IS : 455) or Portland Pozzolana Cement (PPC) (Fly ash based) – conforming to IS : 1489 (Part-I) as required in the work, from reputed manufactures of cement such as ACC, Ultratech, Vikram, Shree Cement, Ambuja, Jaypee Cement, Century Cement & J.K. Cement or from any other reputed cement Manufacturer having a production capacity not less than one million tons per annum.
- The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacture(s) which the contractor proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufactures, given by the tenderer, fully or partially.**
- Supply of cement shall be taken in 50 Kg bags bearing manufacture's name, batch No. & ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got issue in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- If Portland Pozzolana cement or Portland slag cement is used, suitable modification in deshuttering time etc. shall be done if need be as per specifications and standards and as directed by Engineer – in – charge and nothing extra shall be payable on this account.
- No extra payment / deduction shall be made from the payment to the contractor for using any of the above type of cement.
- 2.2 The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer - in - charge.
- 2.3 For each grade / type, cement bags shall be stored in two separate godowns, one for tested cement and the other for fresh cement (under testing) constructed by the contractor at site of work as per sketch shown in General conditions of contract for CPWD works 2020 with weather proof roofs and walls, for which no extra payment shall be made. The size of the cement godown is indicated in the sketch for guidance only. The actual size of godown shall be as per site requirements and as per the direction of the Engineer in charge and nothing extra shall be paid for the same. The decision of the Engineer-in-charge regarding the capacity required/needed will be final. However, the capacity of each godown shall not be less than 100 tonnes. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with CPWD Engineer-in-charge or his authorized representative and that of other lock with the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both the parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed Proforma and signed daily by the contractor or his authorized agent in token of its correctness.
- 2.4 The cement shall be got tested by Engineer –in –charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. The 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 cement does not conform to relevant BIS codes.

(b) By the Department, if the results show that the cement conforms to relevant BIS codes.

2.4.1 All other charges of sampling, packing and transportation of sample shall also be borne by the contractors.

2.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained separately for each type of cement, as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause 42 of the contract and shall be governed by conditions laid therein. However, for consumption lesser beyond permissible theoretical variation recovery shall be made in accordance with conditions of contract at Schedule A to F (CPWD-7), without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be. In case of excess consumption, no adjustment shall be made.

(i) Cement brought to site and cement remaining unused after completion of work shall not be removed from site without return permission of the Engineer-in-charge.

(ii) Damaged cement shall be removed from the site immediately by the contractor on receipt of notice in written. In case if he does not do within three days or receipt of same notice, the Engineer-in-charge shall get removed at the site of the contractor.

**2.6 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.**

### **3.0 CONDITIONS FOR REINFORCEMENT STEEL: -**

3.1 The contractor shall procure TMT bars of ~~Fe 415 / Fe 415D / Fe 500 /~~ Fe 500D ~~/ Fe 550 / Fe 550D~~ grade from primary producers such as SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power Ltd. and JSW Steel Ltd. or any other producer as approved by CPWD who are using iron ore as the basic raw material / input and having crude steel capacity of 2.0 Million tonnes per annum and above.

In case of non-availability of steel from primary producers, use of TMT reinforcement bars procured from secondary producers will be allowed subject to fulfillment of following conditions:

- a. The grade of the steel such as ~~Fe 415 / Fe 415D / Fe 500 /~~ Fe 500D ~~/ Fe 550 / Fe 550D~~ or other grade to be procured is to be specified as per BIS: 1786 - 2008.
- b. The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786: 2008. In addition to BIS license, the secondary producer must have valid license from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.
- c. The TMT bars procured from primary producers and ISPs shall conform to manufacture's specifications.
- d. The TMT bars procured from secondary producers shall conform to the specifications as laid down by Tempcore, Thermex, Evcon, Turbo and Turboquench as the case may be.
- e. TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786: 2008 pertaining to ~~Fe 415 / Fe 415D / Fe 500 /~~ Fe 500D ~~/ Fe 550 / Fe 550D~~ or other grade of steel as specified in the tender.

3.2 Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (c) & (d) above, the

same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

In case contractor is permitted to use TMT reinforcement bars procured from secondary producers then:

(i) The base price of TMT reinforcement bars as stipulated under schedule 'F' shall be reduced by Rs. 6700/- MT. However, for operation of provisions of clause 10CA in such case, the indices for TMT reinforcement bars of secondary producers will be considered same as for primary producers.

(ii) The rate of providing & laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced by Rs. 8.00 per kg.

- 3.3 The steel reinforcement bars shall be brought at site in bulk supply of 25 tonnes or more as decided by the Engineer in charge.
- 3.4 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 3.5 For checking nominal mass tensile strength bend test re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Dia of bar	For consignment below 100tonnes	For consignment above 100tonnes
Under 10 mm	One sample for each 25 tonnes or part thereof	One sample for each 40tonnes or part thereof
10 mm to 16mm	One sample for each 35 tonnes or part thereof	One sample for each 45tonnes or part thereof
Over 16mm	One sample for each 45 tonnes or part thereof	One sample for each 50tonnes or part thereof

- 3.6 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
- 3.7 All other charges of sampling, packing and transportation of sample shall also be borne by the Contractor.
- 3.8 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- 3.9 Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.
- 3.9(i) Reinforcement including authorized spacer bars and lap pages shall be measured in length for different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- (ii) The standard sectional weights referred to shall be as in Table 5.4 in para 5.3.4 in revised CPWD specifications 2009 Vol. I will be considered for conversion of length of various sizes of TMT bars in to standard weight.

(iii) Record of actual sectional weights shall also be kept dia wise and lot wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer in charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight.

(a) If the derived weight as in sub-para (iii) above is less than the standard weight as in sub-para (ii) above, then the Derived Actual Weight shall be taken for payment.

(b) If the derived actual weight is found more than the standard weight, than standard weight as worked out in sub para (ii) above shall be taken for payment. Nothing shall be paid extra for the difference in Derived/ Actual Weight and standard weight.

The contractor has to obtain vouchers and furnish test certificate to the Engineer-in-charge in respect of all the lots of Steel brought by him from approved suppliers at the site of work.

3.10 Every care should be taken to avoid mixing different types of grades of bars in the same structural members as main reinforcement to satisfy relevant clause of IS: 456. In case of buildings, wherever the situation necessitates, the changeover shall be permitted only from any one level onwards. In case of foundations, all foundation elements (footings and grade beams) shall have the same kind of steel. In the case of columns, all structural elements up to the level of change, where the changeover is taking place should have the same kind of steel as those in columns.

3.11 The reinforcing steel brought to site of work shall be stored on brick / timber platform of 30 / 40 - cm height, nothing extra shall be paid on this account.

#### **4.0 SAFETY MEASURES AT CONSTRUCTION SITE**

In order to ensure safe construction, following shall be adhered for strict compliance at the site: -

- (i) The work site shall be properly barricaded.
- (ii) Adequate signage's indicating 'Work in Progress – Inconvenience caused is Regretted' or Diversion Signs shall be put on the sites conspicuously visible to the public even during night hours. These are extremely essential where works are carried out at public places in use by the public.
- (iii) The construction malba at site shall be regularly removed on daily basis.
- (iv) All field officials and the workers must be provided with safety helmets, safety shoes and safety belts.
- (v) Proper MS pipe scaffoldings with work – platforms and easy-access ladders shall be provided at site to avoid accidents.

Necessary First-Aid kit shall be available at the site.

The above provisions shall be followed in addition to the provisions of General Condition of Contract.

**5.0 SPECIFICATIONS FOR FLY ASH BRICKS** - All fly ash bricks as brought to the site shall conform to the strength & durability parameters as prescribed in the tender and CPWD specifications.



**6.0 The contractor shall submit 'Method Statement' for the approval soon after the award of work.** 'Method Statement' is a statement by which the construction procedures for important activities of construction are stated, checked and approved. Method Statement shall have description of the item with elaborate procedures in steps to implement the same. The specification of the materials involved their testing and acceptance criteria, equipments to be used, precautions to be taken, mode of measurements etc.

**6.1 Formwork for exposed concrete surfaces: -**

6.1.1 Where it is specifically shown on the drawings to have original fair face finish of concrete surface without any rendering of plastering, formwork shall be carried put by using plywood on steel plates of approved quality.

6.1.2 The forms shall be constructed so as to produce a uniform and consistent texture and pattern on the face of the concrete. The formwork shall be placed so that all horizontals are constructed of lumber and are not paneled and the formwork joints shall be staggered.

6.1.3 To achieve a finish which shall be free of board marks, the formwork shall be faced with plywood or equivalent material in large sheets. The sheets shall be arranged in an approved pattern. Whenever possible, joints between sheets shall be arranged to coincide with architectural feature, sills, window heads or change in direction of surface. All joints between panels shall be vertical or horizontal unless otherwise directed. Suitable joints shall be approved between sheets. The joints shall be arranged and fitted so that no blemish or mark is imparted to the finished surfaces.

6.1.4 Forms for exposed concrete surfaces shall be constructed with grade strips (the underside of which indicate top of pour) at horizontal constructions joints, unless the use of groove strips is specified on the drawings. The reset forms shall be tightened against the concrete so that the forms will not be spread and permit abrupt irregularities or loss of mortar. Supplementary form ties shall be used as necessary to hold the reset forms tight against the concrete.

6.1.5 For fair faced concrete, the position of through bolts will be restricted and generally as indicated on the drawings.

6.1.6 Plywood and steel plates used in the formwork for obtaining exposed surfaces shall be got approved from Engineer-in-charge on each use. However, no forms will be allowed for reuse if it is doubtful to produce desired texture of exposed concrete.

6.1.7 Cement of only approved shade shall be used preferably of single lot to achieve integrity of texture.

**6.2 Class of Surface Finish: -**

6.2.1 For Beams & Slabs:

The finish shall be uniform, dense and smooth. no grout, no grain pattern, no crazing and no major blemishes shall be permitted. Abrupt irregularities not exceeding 3mm and gradual irregularities less than 5mm in 2m length only shall be permitted.

6.2.2 For Columns/Wall/Fins:

The finish shall be uniform and smooth leveling the surface of the compacted concrete shall be done with a screed board with power floating the surface and over that steel trowelling the surface under firm pressure characteristics of finish shall be brush marks < 3mm gradual irregularities less than 10mm in 2m.

**6.3 Tolerance in Finished Concrete: -**

The formwork shall be so made as to produce a finished concrete true to shape, lines, level, plumb and dimensions as shown in the drawings subject to the following tolerance unless otherwise specified in this specification or drawings.

**6.4 WALL/COLUMN/FINS:**

21.4.1 Variation from the plumb  $\pm 6\text{mm}$  Upto 3m height

21.4.2 Variation from the plumb of conspicuous liner	± 6mm	Upto 6m height
21.4.3 Variation in the size of wall openings	(+)15mm (-) 6mm	
21.4.4 Variation in parapet wall thickness		
(a) Upto 30cm thickness	± 6mm	

## 6.5 SLAB, BEAM & GIRDER FORMS:

21.5.1 Variation from the level or from the specified grid for beam soffit before removal of shores,

(a) In any 3m	± 6mm
(b) In any 6m	± 10mm

All the tolerances mentioned above shall apply to concrete dimensions only, and not to positioning of vertical steel or dowels. The tolerances given above are specified for local aberration in the finished concrete surface and should not be taken as tolerance for the entire structure taken as whole for the setting and alignment of formwork. Any error, within the above tolerance limits, or any other if noticed in any of the structure after part or portion stripping of forms, shall be corrected in the subsequent work to bring back the structure to its true line, level and alignment.

**7.0 Poly-sulphide:** The gaps between frames and supports and also any gaps in the door and windows sections shall be raked out as directed and filled with poly-sulphide of approved colour and make to ensure complete water tightness. The poly-sulphide shall be of such colour and composition that it would not stain the masonry/concrete work, shall receive paint without bleeding, will not sag or run and shall not set hard or dry out under any conditions of weather. The sample of poly-sulphide to be used for this purpose shall be got approved from the Engineer-in-Charge before its actual use.

## **8.0“Concealment of expansion joint work”** with flexible polysulphide sealant.

7.1 The work shall be got executed from the specialized agency.

7.2 Total quantity of material required shall be arranged only after obtaining the prior approval of the make by Engineer-in-charge. It shall be ensured that the consumption of the material is as per specified requirements.

7.3 Before commencement of treatment on any surface, it shall be ensured that the outlet drain pipes / spouts have been fixed and the spout openings have been chased and rounded off properly for easy flow of water.

**(SPECIMEN)**  
**(Ref. para 3.3 of Particular Specifications and Special conditions)**

**GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECT AFTER COMPLETION  
 IN RESPECT OF WATER PROOFING WORKS**

The Agreement made this .....day of .....two thousand and ..... between .....son of .....of .....(hereinafter called the **Guarantor** of the one part) and The Executive Director, AIIMS Rishikesh (hereinafter called 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 said contract recited completely water and leak – proof.

AND WHEREAS **GUARANTOR** agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for ..... from the date of giving of water proofing treatment.

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 ..... to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for 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 water 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 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 such 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 got done by the Department by some other contractor at the **GUARANTOR'S** cost and risk. 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 execute the water proofing or commits breach thereunder then the **GUARANTOR** will indemnify the Principal and his successors against all loss, damage, cost, expense or 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 Obligor ..... and by ..... and for and on behalf of The Executive Director, AIIMS Rishikesh on the day, month and year above written.

Signed, sealed and delivered by OBLIGOR in the presence of –

1. ....
2. ....

Signed for and on behalf of The Executive Director, AIIMS Rishikesh by .....in the presence of –

1. ....
2. ....

## LIST OF APPROVED MATERIALS (CIVIL)

Note :

1. Unless otherwise specified, the brand/make of the material as specified in the item nomenclature or in the particular specifications or in the list of approved materials attached in the tender, shall be used in the work.
2. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material/ Brand/ Make.
3. Whenever the specified brand of material is not available than, the Engineer-in-charge may approve any material equivalent to that specified subject to proof being offered by the Contractor for its equivalence and its non-availability to his satisfaction.

**MATERIALS:**

**BRAND/MAKE**

1	MATERIALS:	BRAND/MAKE
1	AAC Block	Aerocon, Siporex, Ultratech, Ecolite, Concretite, J.K. Laxmi (Cement Ltd.), BILTECH, Kansal, Dlite Blocks
2	AAC Block Adhesive	Ferrous crete(Ferro-1188), ARDEX ENDURA (White Star), Ultratech (Fixed-Block)
3	Acrylic Distemper, Emulsion, Synthetic Enamel Paint and Primer.	Asian Paints, ICI Dulux, Berger, Nerolac
4	Epoxy Adhesive	FOSROC, Aquomix , Choksey, BAL-ENDURA,MYK Laticrete
5	Aluminium Composite Panel	Alpolic, Aluco Bond, Reynobond, Euro bond, Alstrong
6	Aluminium Extrusions	Hindalco, Indalco, Jindal
7	Aluminum Sections	Jindal, Hindalco, Indalco
8	Annealed Float Glass	Saint Gobain, Modi Guard, Asahi
9	Bitumen	Indian Oil, Hindustan Petroleum, Bharat Petroleum
10	Calcium Silicate Board / Tiles	Aerolite, Hilux, Starpan
11	CC Pavers / Grass Pavers	Nitco, Hindustan, Ultra, KJS Concrete, Duracrete, Mehtab Tiles, Kaptim
12	Centrifugally Cast Iron Pipe & Fittings	NECO, SKF, BIC, RIF, KAPILANSH, HIF
13	Ceramic Tiles	Kajaria, Nitco, Orient Bell, Johnson, RAK Ceramics
14	Chequered / Tactile Tiles	Dura, Eurocon, Modern, Hindistan, Johnson, Eavison
15	CI Manhole Cover	BIC, SKF, NICO, Hepco, Kapilansh, RIF
16	CI Double flanged non-return valves	Kirloskar, Sant, Kartar
17	CP fittings	Jaquar, Marc, Kohler, Grohe
18	CPVC Pipes & Fittings	Astral Flowguard, Ashirvad, Prince, Supreme, Finolex, VECTUS
19	Curtain Carrier / Drapery Rod	Marvel, Vista levlor, Johnson.
20	Dash fastener, Expansion Bolt	Hilti, Bosch Fischer
21	Hydraulic Door closer, Floor springs	Dorma, Hettich, Hafele, Geze
22	Ductile Iron Pipe (Water Supply)	Electro steel, Kesso, KDUPL, Electro Spun
23	EPDM Gasket	Hanu, Anand, Lescuyer
24	GRC / Tactile Tile	Unistone, Eurocon, Dazzle
25	Epoxy Grouting Compound	Pidilite, Ferrous Crete(Ferro-102), MYK LATICRETE, Fosrock
26	Epoxy Primer & Paints	Berger, Pidilite, CICO, BASF, SIKA, Fosrock
27	Fire Check door	Navair, Godrej, Shakti
28	Float Glass Mirror	Modifloat, Saint Gobain, Asahi
29	Flush Doors (ISI Mark only)	Century, Kitlam, Archid, Greenply, Marino, Duro, Gujcon
30	Friction Stay	Earl-Bihari, Geze, Hettich, Securistyle
31	Galvanized/Stainless Steel Anchor Fasteners	Shakti, Arrow, Hilti, Fischer
32	GI Pipe & fittings	Tata, Zenith, Jindal, Prakash Surya, Swastik; (ISI Marked only)
33	GI Sheet	Sail, TATA, Jindal or equivalent
34	Gun Metal Gate Valve	Zoloto, Leader, SANT, Prima
35	Glass Mosaic Tile	Bisazza, Italia, Palladio, Mridul
36	Gypsum Board (False Ceiling)	Boral Gypsum, India Gypsum, St. Gobain
37	Hardener	Hardcrete of Snowcem India, Pidilite, CICO.
38	HDPE Pipes	VECTUS, Emco, Polyfins, Pioneer, Plyfab
39	Jet Assembly for EWC/Health Faucet	Parryware , Jaquar, Marc, PRIMA(ISI)
40	Kitchen loft tank	Sintex, Tirupati Structural Ltd, KMS Plast world P.Ltd. Planet Plastics, Sri Kamakshi Traders, Sreyah Novel InC.
41	Laminate and Veneers	Merino, Greenlam, Kitlam, Duro
42	Locks / Latch	Godrej, Harrision, Dorma, Doorset (ISI)
43	Marine Plywood / BWP Ply	Duro, Century, Greenlam
44	Melamine Polish	Asian Paints, Pidilite, ICI Dulux, Burger
45	Metal False Ceiling	Nitobond, Armstrong, Trac, Durlum, Lafarge, Anutone
46	Mineral Fibre/ GRG Ceiling	Armstrong, Daiken, Anutone, Diamond, Credence
47	M.S. Pipe (Railing)	Jindal, Tata, RINL, Prakash Surya
48	M.S. Tubes	Tata, Apollo, Prakash Surya
49	Multicoat Synthetic Plaster/ Textured Exterior wall paint	Spectrum, Heritage, Ultratech
50	Plywood, Block Board	Greenply, Century, Duro
51	Polycarbonate Sheet	Danpalon (DPI), Bayer, Macrolux
52	Polysulphide / Silicon Sealent	Pidilite, Fosroc, Tuffseal, Chouksey Chemicals, Perma, BASF
53	POP (Plaster of paris)	JK, Laxmi, Sriram Nirman, Sakarni
54	PPR Pipes	SFMC, SAFE, Poiner Industries

55	Precast CC interlocking Tiles	Hindustan, Paver India, KK
56	Precoatd Profile Sheet	Tata, Bhushan or equivalent
57	Pre-laminated Particle Board	Ecoboard, Action-Tesa, Duro, Century Ply, Greenlam, Albihari
58	Pressed steel door frame	M/s Engineers & Fabricator, Raipur, M/s J.K. Enterprises, Jaipur, M/s Jangid Engineering Works, Jaipur, M/s Swastik Super Industries, Mohali, M/s SKS Steel Industries, New Delhi.
59	PTMT Fittings	Prayag, Polytuf, Pearl, Millennium, PRIMA
60	PVC Cistern	Steelbird, Jindal, Seabird, Prayag, Commander
61	PVC Connection Pipe	Supreme, Prince, Finolex
62	PVC Rain Water Pipe & Fitting	Finolax, Kisan, Kasta, Supreme, Astral, Prince
63	Ready Mix Concrete (RMC)	Lafarge, Alchon, ACC, L&T, Grasim, Ultratech, RMC India
64	Ready Mix plaster	Ultratech, Precisecon Chem, Perma, Ferrous Crete, JK, Fosrock,
65	PVC Shutter	Polygreen, Rajshri, Plastogreen, Sintex
66	PVC Water storage Tank (Only ISI)	VECTUS, Water well, Plasto, Polycon, Sintex. (Weight as per ISI)
67	Sluice Valve	Kirloskar, Venus, Kalpana, SANT, KARTAR, Zolto
68	Solid PVC frames and shutters	Polygreen, Rajshri, Plastogreen, Sintex
69	Stainless Steel	Jindal, Salem or equivalent
70	Stainless steel Sink with or without Draining board.	Nirali, Hindware, Frankee, Neelkanth, Jaquar
71	Stainless steel Door/Window fittings & Fixtures	Dorma, Ozone, D-Line, Hettich, Kich, Geze
72	Structural steel section	TATA, SAIL, RINL, Jindal
73	Super plasticizer / admixture	Sika, Fosroc, Chouksey Chemicals, BASF
74	Tensile Fabric	Bluestone, Encon, Structure Flex
75	Tile Adhesive	Ferrous Crete(Ferro-1122), Ardex Endura (Gold Star), PIDILITE (Fevimate XL), WEABR(Saint-Gobin) Sika, Thermoshield, Somany
76	Towel Ring/Towel Rod/Towel Rack	Marc, Jaquar, Kolher, Grohe
77	Tubular steel Window, ventilator, Door frame	M/s Engineers & Fabricator, Raipur, M/s J.K. Enterprises, Jaipur, M/s Swastik Super Industries, Mohali (Punjab) M/s Jangid Engg. Jaipur
78	UPVC Pipes & Fittings	Astral Flowguard, Ashirvad, Prince, Supreme, Finolex, VECTUS
79	Urinal, Washbasin, Orrisa Pattern W.C., Wall mounted European W.C.Seat with Cistern	Hindware, Parryware, Jaquar, Cera, Kolher, Grohe
80	Vitrified Tile	Johnson -Marbonite, Somany, Kajaria, Orient Bell, NITCO, RAK
81	Wall Putty	JK, BIRLA, SARAPUTTY
82	Waste Pipe	Kamal, Viking, Jaquar
83	Water Proofing Compound (Liquid)	Pidilite, Cico, Impermo
84	White Cement	JK White, Birla White, Grasim
85	ISI marked, FRLS PVC insulated, single core copper conductor cable	KEI,POLYCAB,Havells,RR
86	ISI marked, PVC conduit, 20 mm PVC bends, PVC couplers	Poly King,AKG
87	15/16 & 5/6 amps socket outlet, piano type ISI marked, S.P. 5/6 amps, one way switch, piano type ISI marked, Stepped type Modular Fan regulator( 2 module)	Havells,Anchor,Legrand,Cona
88	SPN, double door, MCB ,DB, 6 amps. To 32 amps.ratings, SP MCB, "C" curve,10KA breaking capacity	LNT,Hevells,Anchor,Legrand
89	BEE 5 star rated, ceiling fan	Usha,Hevells,Orient

**Schedule of Quantity****Name of work: Establishment of student activity centre near old type-V(B. No.65) at AIIMS Rishikesh.**

<b>Sr.No.</b>	<b>Description of item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
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 lift upto 1.5 m, as directed by Engineer-inCharge: All kinds of soil	Sqm	360	107.00	38520.00
2.	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, 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 : All kinds of soil, Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia	Meter	65	417.35	27127.75
3.	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 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	Cum	40	6050.65	242026.00
4.	Making plinth protection 50mm 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 75mm 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.	Sqm	50	681.65	34082.50
5.	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	20	8288.35	165767.00
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 @	Sqm	120	1063.45	127614.00

	3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.				
7.	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 mitered 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. Non decorative finish (matt finish)	Sqm	10	3467.20	34672.00
8.	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame 54691/2022/ENGG_CELL 100/108 39 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: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	10	2015.75	20157.50
9.	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.	Kg	300	78.20	23460.00
10.	Providing and fixing 1mm 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. Using M.S. angels 40x40x6 mm for diagonal braces	Sqm	10	4781.15	47811.50
11.	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of	Kg	200	69.35	13870.00

	float glass panes with glazing clips and special metal- sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost. 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)				
12.	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. 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).	Kg	200	114.65	22930.00
13.	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 pretreatment of the surface as directed by Engineer-in-charge: Profile B, 10.14.1.1 Fixing with adjustable lugs with split end tail to each jamb metre 444.50	Meter	20	444.50	8890.00
14.	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. Electric resistance or induction butt welded tubes	Kg	700	140.85	98595.00
15.	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with : 4.0 mm thick glass panes	Sqm	10	940.30	9403.00
16.	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) : 25 mm thick	Sqm	120	1706.60	204792.00
17.	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the	Sqm	25	1142.80	28570.00



	manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours 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 grouting the joints with white cement and matching pigments etc., complete.				
18.	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer- in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 sqm 150 671.55 100732.50 54691/2022/ENGG_CELL 101/108 40 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.	Sqm	150	671.55	100732.50
19.	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 center, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with 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 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 : 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%	Sqm	110	1998.25	219807.50

	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 after bending and perforation.				
20.	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	Sqm	250	282.00	70500.00
21.	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	Sqm	250	324.30	81075.00
22.	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound ) content, With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre sqm 64.45	Sqm	250	64.45	16112.50
23.	Wall painting with premium acrylic emulsion paint of interior grade, 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. Two coats	Sqm	250	121.55	30387.50
24.	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	Sqm	250	131.45	32862.50
25.	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.	Sqm	550	123.85	68117.50
26.	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	300	166.85	50055.00
27.	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. In cement mortar	Cum	15	1698.45	25476.75
28.	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. Sheet	Sqm	120	136.00	16320.00
29.	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	Cum	60	7399.20	443952.00
30.	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	Each	4	5540.55	22162.20

	lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid				
31.	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: White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	Each	4	2965.60	11862.40
32.	510x1040 mm bowl depth 250 mm	Each	2	6008.45	12016.90
33.	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.	Each	4	299.35	1197.40
34.	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe, 32 mm dia	Each	4	104.35	417.40
35.	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	Each	1	7004.45	7004.45
36.	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. each 1411.15	Each	4	1411.15	5644.60
37.	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms. each 146.30	Each	2	146.30	292.60
38.	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. each 204.70	Each	4	204.70	818.80
39.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall, 20 mm nominal dia Pipes	Meter	30	325.10	9753.00

40.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall, 25 mm nominal dia Pipes	Meter	30	408.55	12256.50
41.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc. 15 mm nominal dia Pipes	Meter	15	441.15	6617.25
42.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc. 20 mm nominal dia Pipes	Meter	20	513.75	10275.00
43.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work, 20 mm nominal dia Pipes	Meter	30	275.25	8257.50
44.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work, 25 mm nominal dia Pipes	Meter	30	370.65	11119.50
45.	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 25 mm nominal bore	Each	1	399.15	399.15
46.	Providing and fixing uplasticised PVC	Each	4	85.20	340.80

	connection pipe with brass unions : 45 cm length, 15 mm nominal bore				
47.	Providing and fixing uplasticised PVC connection pipe with brass unions : 45 cm length, 20 mm nominal bore	Each	4	102.55	410.20
48.	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.	Per liter	1000	9.70	9700.00
49.	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 : 15 mm nominal bore	Each	4	434.20	1736.80
50.	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore	Each	8	594.75	4758.00
51.	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 : 100 mm diameter	Meter	80	375.75	30060.00
52.	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design : 100 mm diameter S.W. pipe	Meter	80	895.50	71640.00
53.	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 150 x 100 mm size P type, With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2	2474.40	4948.80
54.	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 : 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	Each	4	11687.10	46748.40

	and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
55.	Providing and fixing beveled edge frameless wall mirror of superior make glass (of approved quality) complete with 6 mm thick with Stainless Steel Wall Touch Mirror and Glass Holding Fixing Wall Brackets with Screw and Wall Plugs for 5 mm to 6 mm complete fittings or as per direction of engineer-in-charge.	Sqm	40	1979.33	79173.20
56.	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts,fasteners etc.).	Kg	150	612.25	91837.50
	<b>AC &amp; R work</b>				
57.	Supply, Installation, Testing and Commissioning of 1.5 TR Split AC 4 Star Inverter Type Hot & Cold Make- Mitsubishi, Daikin, Hitachi & as approved by Engineer in-charge	Nos.	6	49499.00	296994
58.	Supply, Installation, Testing and Commissioning of Copper tubing with insulation Make- Totaline, Camipro, Godrej & as approved by Engineer incharge	Meter	30	1000.00	30000.00
59.	Supply, Installation, Testing and Commissioning of Pre-fabricated outdoor unit frame (Wall mount/floor mount)	Nos.	6	500.00	3000.00
60.	Supply, Installation, Testing and Commissioning of PVC Drain pipe with Insulation	meter	30	150.00	4500.00
61.	Supply, Installation, Testing and Commissioning of Electric wiring copper (2.5 mm 4 core communication cable) Make: Havells, Polycab, KEI & as approved by Engineer in-charge	Meter	70	150.00	10500.00
62.	Supply & installation pvc modern wall panelling 5-10 mm thick, size of 1.22 x 2.44 meter each made of pvc resin & calcium powder, melamine/veneer laminated finish, groove perforated L32-2 - (2mm grooves @ 32mm centers), backlined with Sound texblack acoustical fleece, tongue-groove edge for a seamless look, 5-test fire retardant grade/ Non FR, Acoustics NRC 0.65- 0.75 (For E300*	Sqm	50	1052.26	52613.00

	Mounting), size 128x2440x16mm, volume density of base board 800 - 830 Kg/m <sup>3</sup> , 10-10.5Kgs/m <sup>2</sup> (L32) .fix with necessary screws. The Panneling shall be finished as per the drawings and to the satisfaction of the Engineer in Charge. Make: Ryan PVC Panels, Delby PVC, Maharaja PVC, Decoinn				
	<b>ELECTRICAL WORK</b>				
63.	Supplying and fixing suitable size GI/ PVC box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.& as directed by Engineering Incharge Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge.	Each	30	495.00	14850.00
64.	Wiring for light/ power plug with 2X4 sq. mm FRLS PVCinsulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.& as directed by Engineering Incharge. Make :- Havells ,KEI, Polycab and as approved by engineering Incharge	Meter	300	265.00	79500.00
65.	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required. Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge. 100 A, 16 KA,TPMCCB	Each	1	3726.00	3726.00
66.	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar,din bar for mounting MCBs (but without MCBs and incomer ) as required . & as directed by Engineering Incharge Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge . 4 way (4 + 12), Double door	Each	1	5651.00	5651.00
67.	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C"curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.& as directed by Engineering Incharge Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge. Single pole	Each	26	199.00	5174.00
68.	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C"curve, miniature circuit breaker	Each	2	556.00	1112.00

	suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.& as directed by Engineering Incharge Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge. Double pole				
69.	Supplying and fixing following rating, four pole, 415 V, MCB/MCCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.& as directed by Engineering Incharge Make :- Havells ,Anchor, Legrand and as approved by engineering Incharge, 63A	Each	1	3000.00	3000.00
70.	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.& as directed by Engineering Incharge Make :- Havells ,KEI, Polycab and as approved by engineering Incharge. 2 X 10 sq. mm + 1 X 6 sq. mm earth wire	Meter	20	328.00	6560.00
71.	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.& as directed by Engineering Incharge Make :- Havells ,KEI, Polycab and as approved by engineering Incharge. 4 X 10 sq. mm + 2 X 6 sq. mm earth wire	meter	30	543.00	16290.00
72.	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copperconductor single core cable etc. as required.& as directed by Engineering Incharge Make :- Havells ,KEI, Polycab and as approved by engineering Incharge. Group C	Point	25	1189.00	29725.00
73.	Supplying,installation,testing and commissioning of Energy saving and environmental friendly long life 35 W LED Building security light . IP65 Protection and impact resistance of IK07 complete with 40 mm dia 1.20- meter-long GI light grade pipe and fixing arrangement with MS clamp nut bolt and washer etc. complete.	Each	8	3740.00	29920.00
74.	Fabrication, Supply ,Installation ,Testing and Commissioning of outdoor stand mounted Feeder Panel with following specifications : CRCA Sheet of 1.6 mm, Grey Color with 100 A 16KA/3P MCCB 415 V incomer with neutral bar ,suitable size bus bar 3 nos outgoing 1 nos 63 amp 16 KA/3P MCCB 415 V and 2 nos 40	Set	1	48203.00	48203.00



	amp 16KA/3P MCCB 415 V with suitable size bus bar.RYB indicator on incomer with suitable size CTs, VA meter and other accessories complete with all connection etc. as required. Drawing should be approved by engineering Incharge.				
75.	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	Each	8	639.00	5112.00
76.	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	Each	20	65.00	1300.00
77.	Supply of Armoured Aluminium conductor XLPE Insulated sheath Cable of 1.1 KV Grade conforming to IS : 7098 3.5 X 120 Sq. mm	Meter	200	1174.00	234800.00
78.	Supply of Armoured Aluminium conductor XLPE Insulated sheath Cable of 1.1 KV Grade conforming to IS : 7098 3.5 X 25 Sq. mm	meter	100	343.00	34300.00
79.	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm	Meter	100	323.00	32300.00
80.	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 95 sq. mm and upto 185 sq. mm	Meter	100	352.00	35200.00
81.	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. 90 mm dia (OD-90 mm & ID-76 mm nominal)	Meter	100	249.00	24900.00
82.	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	2	11794.00	23588.00
83.	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	Meter	10	1224.00	12240.00
84.	Providing and laying earth connection from	Meter	10	257.00	2570.00

	earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.				
85.	Supplying, installation, testing and commissioning of Astronomical time switch of following configuration to be mounted in feeder pillars / Lighting DBs for automatic switching On & OFF of street lights at sun set & sun rise or twilight (Auto ON, Auto OFF, Auto modes) with manual override facility with 12/24 hour display format with suitable battery and indication for relay status i/c programming at site complete as required. 3 output (1 output per phase) and suitable for three phase supply	Each	1	8831.00	8831.00
86.	Supply, Installation, testing and commissioning of 2x2 LED panel light with following specifications, including connection, wiring with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	30	2384.00	71520.00
87.	Supply, Installation, testing and commissioning of 15 watt Round light with following specifications, including connection, wiring, ceiling cutting with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	10	906.00	9060.00
88.	Supply, Installation, testing and commissioning of 60 watt wall mounted, Fan Blade Material - Plastic, Sweep Size 400 millimeter, No. of Blades 3, Rated Fan Speed (RPM) 1000-1500. Make :- Havells, CROMPTON, Bajaj, orient and as approved by engineering Incharge	Each	18	2239.00	40302.00
89.	Supply, Installation, testing and commissioning Capacitor Type propeller type ac ventilating fan-exhaust 200 mm Sweep. Make :- Havells, CROMPTON, Bajaj, orient and as approved by engineering Incharge	Each	4	2249.00	8996.00
90.	Supply Installation, testing and commissioning of 22 watt, 5000-6500 K, Cool White, IP 65, Cool White, T5 LED batten light. Make :- havells, philips, orient and as approved by engineering incharge.	Each	30	628.00	18840.00
91.	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) & as directed by Engineering Incharge Make :- Havells, Anchor, Legrand and as approved by engineering Incharge. 8 way, Double door	Each	2	1760.00	3520.00
92.	SITC of Electro-Voice loudspeaker 8" 2-way, 200 Watt. Integrated Quick SAM Heavy-Duty Strong-Arm Mounting Bracket Included, 8 inch	Each	4	96358.80	385435.20

	Weatherized Cone High-Output LF Transducer. Frequency Response (-3 dB): 60 Hz - 20 kHz1, Frequency Range (-10 dB): 48 Hz – 20 kHz,, Max Calculated SPL: 123 dB, Rated System Power: 200 W Cont.2, 400 W Prog., 800 W Peak, “T” Version Wattage Taps: 70V – 6, 12.5, 25, 50, 100, 8 Ω by p0V – 12.5, 25, 50, 100, 8 Ω bypass, Suspension: Integrated Quick SAM Heavy-Duty Strong-Arm Mounting Bracket, Grille: Polyester Powder Coated, 18GA Galvanized Steel. Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge				
93.	SITC of Electro-Voice Q series amplifiers offer a package of reliable high output power, Up to 2 x 650 W into 2 Ω. Classic EV amplifier dynamic headroom for real-world music and applications, The NL4 connection on output A also carries output B on pins +/- 2 to allow easy connection to bi-amped loudspeakers high efficiency and legendary pro audio performance. Continuous Output Power(1 kHz, THD 1%), 650 Watts, Input Impedance (Balanced) 20 kΩ, Input Sensitivity +2.2 dBu, Maximum Input Voltage +21 dBu (8.69 Vrms), Signal-to-Noise Ratio (A-weighted) 106 dB, Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge	Each	1	142566.42	142566.42
94.	SITC of Electro Voice 18” sub woofer having Quick Smart DSP features best-inclass processing equipped with 1300 watt class D power amplifier delivering 134 dB SPL. Intelligent thermal management with a variable-speed fan controlled by multiple onboard sensors .Two (2) XLR outputs for easy system expansion to additional loudspeakers or subwoofers. Large slot ports for low distortion and excellent bass extension. Two (2) metal grille reinforcement bar. M20 threaded pole mount plate. Waveguide design provides precise and consistent coverage. Freq response 40 to 150 Hz@ -3dB, Max SPL 134 Db enclosure is in 15 mm wood having internal bracing with durable EV coat finish. Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge	Each	1	147207.36	147207.36
95.	SITC of Mipro PLL Synthesized Technologies UHF Cordless Microphone Lapel Make:- Mipro & equivalent and as approved make direction by Engineering in charge	Each	2	27484.56	54969.12
96.	SITC of Feedback suppression algorithm. Suppresses feedback before it occurs. Automatically adapts to the acoustical situation. Up to 12 dB additional gain before	Each	1	92375.12	92375.12

	feedback occurs. Balanced line or microphone input with phantom supply. Mains power supply Voltage 230/115 VAC, $\pm 10\%$ , 50/60 Hz, Inrush current 1.5 A @ 230 VAC / 3 A @ 115 VAC , Max power consumption 50 VA. Performance Sample rate (fs) 32 kHz, Frequency response 125 Hz to 15 kHz, Distortion 90 dB, Signal delay 25 dB (50 Hz to 20 kHz), Phantom power 16 V (mic only, switchable Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge.				
97.	SITC of 16-Channel Mixing Console. Works with the iPad (2 or later) through the Apple iPad Camera Connection Kit / Lightning to USB Camera Adapter Includes Cubase AI DAW software download version, PAD switch on mono inputs, +48V phantom power, XLR balanced outputs Internal universal power supply for world-wide use. Frequency response +0.5 dB/-1.5 dB (20 Hz to 48 kHz) , refer to the nominal output level @ 1 kHz, GAIN knob: Min, Power consumption 30 W, Max. 10 Mic / 16 Line Inputs (8 mono + 4 stereo) / 4 GROUPEBuses + 1 Stereo Bus / 4 AUX (incl. FX). Make:- Yamaha & equivalent and as approved make direction by Engineering in charge.	Each	1	45085.44	45085.44
98.	SITC of Gooseneck microphone condenser type unidirectional with flexible stem, phantom powered, voltage range 12-48 Volts, sensitivity 2.5 mV/pascal, Freq 100 to 16000 Hz, output impedance < 200 Ohms. Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge.	Each	2	20876.56	41753.12
99.	SITC of cardioid hand held wired unidirectional mike for general purpose , Freq 80 to 12000 Hz, sensitivity 1.7 mV/pascal , rugged body in dark grey finish Make:- BOSCH/BOSE/d&B Audiotechnik and as approved make direction by Engineering in charge.	Each	2	5593.20	11186.4
100.	SITC of Make Mike Point	Point	6	4484.00	26904.00
101.	SITC of 1.5 Sq mm 2 core copper flexible cable	Meter	150	114.46	17169.00
102.	SITC of 2 core shielded Microphone cable	Meter	300	174.64	52392.00
103.	SITC of Custom built 19U professional metallic rack powder coated with front door of transparent acrylic sheet , fan cooled , completely wired to accommodate offered amplifiers.	Each	1	46846	46846.00
	<b>Total</b>				<b>5037721.53</b>