

All India Institute of Medical Sciences Rishikesh-249203



Construction of VRDL Lab Phase 3 at AIIMS Rishikesh

Ref. No.	:	15/SE/Civil/2023-24
Publishing Date	:	08-01-2024 on 05:00PM
Bid Submission Start Date	:	08-01-2024 on 05:00PM
Last Date of Bid Submission	:	30-01-2024 on 03:00PM
Bid Opening	:	31-01-2024 on 03:00PM

INDEX

Name of Work: Construction of VRDL Lab Phase 3 at AIIMS Rishikesh

Serial No.	Contents	Page No.	Remarks
1.	Cover Page	01	
2.	Index	02	
	<u>PART - A</u>		
2.	Notice inviting tender	03	
3.	Information and instructions for Contractors	04 to 05	
4.	Notice inviting tender (CPWD - 6)	06 to 08	
5.	Integrity Pact	09 to 16	
6.	Tender and contract (Civil)	17 to 18	
7.	Schedule "A" to "F" (Civil)	19 to 24	
	<u>PART - B</u>		
8.	Particular specification and Special conditions (Civil)	25 to 36	
9.	List of approved make	37 to 39	
10.	Schedule of Quantities	40 to 53	

 Certified that this bid document contains pages 1 to 53 (One to Fifty-three page).

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**

AIIMS, Rishikesh**NOTICE INVITING TENDER**

The Executive Engineer, AIIMS Rishikesh on behalf of the Executive Director, AIIMS Rishikesh invites an item rate e-tenders for the enlisted contractor in the appropriate classes and category in CPWD, MES and the state government of Uttarakhand (PWD & IRRIGATION Department only) having an experience of the similar works from any government (State or Central or any autonomous body of the central government) for the following work: -

NIT No. : **15/SE/Civil/2023-24**

Name of Work: **Construction of VRDL Lab Phase 3 at AIIMS Rishikesh**

Estimated Cost: **Rs. 67,32,974.00**

Earnest money: **Rs.3,36,649.00**

Period of completion: **150 Days**

Last date & time of submission of bids: **30-01-2024 on 03:00PM**

The tender forms and other details can be seen and downloaded from the website 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 an item rate e-tenders for the enlisted contractor in the appropriate classes and category in CPWD, MES, and state government of Uttarakhand (PWD & IRRIGATION Department only) having an experience of the similar works from any government (State or Central or any autonomous body of the central government) 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 office
<u>Construction of VRDL Lab Phase 3 at AIIMS Rishikesh</u>	Rs.67,32,974.00	Rs. 336649.00	150 Days	30-01-2024 on 03:00PM	31-01-2024 on 03:00PM	Agency can submit EMD in hard copy in a sealed envelope with clearly mentioning the Tender Id No. on or before last date and time of submission of bid. Delay is the post or courier may be treated as disqualified.

1. 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.
2. Information and Instructions for bidders posted on website shall form part of bid document.
3. 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 or <https://eprocure.gov.in>
4. Those contractors not registered on the website mentioned above, are requested to get registered beforehand.
5. The intending bidder must have valid class-III digital signature to submit the bid.
6. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
7. Contractor can upload documents in the form of PDF format only.
8. The contractor should quote the rate of item including GST as per statutory rules.
9. The successful bidders have to execute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) within Ten (10) days from the date of award of this tender in his favour and also required to furnish the 10% 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 10 (Ten) 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.

10. 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.
11. Contractor shall deposit earnest money in receipt treasury challan/deposit at call receipt of a schedule bank/fixed deposit receipt of schedule bank/demand draft of schedule bank/bank guarantee issued by a schedule bank is scanned and uploaded and submit in original upto one day after last date of submission of bid or contractor can submit EMD directly in bank account of AIIMS Rishikesh. Detail is mentioned below-

Account Number: -6189000100021125

Bank name: - Punjab National Bank

Branch name: - PNB Pashulok

IFSC code: - PUNB0618900

12. List of Self attested 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. Scanned copy of EMD in form of FDR/DD/online receipt.
- II. Affidavit (on Rs.100 non judicial stamp with notarized) regarding establishment of proprietorship firm / registered partnership deed / letter of incorporation for private ltd / ltd firm with written power of attorney (in case of bidder is owner, not required) of the authorized signatory.
- III. Self-certified copy of work completion certificate for similar works as per eligibility criteria
- IV. Proof of online deposit of tender fee and EMD. For tender fee exemption, NSIC/MSE certificate comprising relevant category of work should be uploaded.
- V. Copy of registration certificate with CPWD, State PWD, MES, as mentioned in NIT.
- VI. Notarized undertaking on Rs. 100 non judicial stamp paper as per NIT.
- VII. Turnover certificate of last three years having UDIN number issued by the CA.
- VIII. Valid solvency certificate not more than six months.
- IX. GST,
- X. PAN,
- XI. ESI,
- XII. EPF
- XIII. Notarized copy of the registered partnership deed.
- XIV. Valid Registration certificate of contractor in the appropriate category.
- XV. Proposal for eligible associating agencies as per Form-G

13. **Due to Scarcity of funds payments may get delayed. No interest shall be paid to contractor due to delay in payment.**

14. Contract/Bidder have to submit EMD in hard copy in a sealed envelope with clearly mentioning the Tender Id No. on or before the last date and time of submission of bid. Delay in the post or courier may be treated as disqualified.

15. Additional Performance Security may be applicable in case of bidder quoted the abnormal below rate which is decided by the competent authority. The abnormal below rate may also be decided by the competent authority and their decision may be final. Bidder/Contractor has also to submit the market rate analysis to carry out the work. Non-submission of the Additional performance guarantee in a stipulated time shall be treated as disqualified from the contract and bidder/contractor may also be debarred for the three years in further participation in any bid of any department AIIMS.

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 an item rate e-tenders for the enlisted contractor in the appropriate classes and category in CPWD, MES, and state government of Uttarakhand (PWD & IRRIGATION Department only) having an experience of the similar works from any government (State or Central or any autonomous body of the central government) for the work **“Construction of VRDL Lab Phase 3 at AIIMS Rishikesh”**

- 1.1 The work is estimated to Cost **Rs 67,32,974.00**, 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 for the Experience

Experience of having successfully completed similar works during the last seven years ending last day of month previous to the one in which tenders are invited.

- (a) Three similar completed works each costing not less than 40% of the estimated cost put to tender,
or
- (b) Two similar completed works each costing not less than 60% of the estimated cost put to tender,
or
- (c) One similar completed work costing not less than 80% of the estimated cost put to tender.

Similar works means Experience of building construction work/Renovation work/Civil Maintenance 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. Scanned copy of EMD in form of FDR/DD/online receipt and Contract/Bidder have to submit EMD in hard copy in a sealed envelope with clearly mentioning the Tender Id No. on or before the last date and time of submission of bid. Delay in the post or courier may be treated as disqualified.

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. 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 **150 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 or <https://eprocure.gov.in>

The bid submitted shall be opened on **31-01-2024 on 03:00PM**

6. The contractor whose bid is accepted will be required to furnish performance guarantee of 10 (Ten 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.
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 10 days from the stipulated date

of start of the work, sign the contract consisting of: -

- a) 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.
 - b) 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.
13. The valid solvency certificate of minimum 40% of the tendered amount issued by any nationalized bank under the governed by RBI.
 14. The turnover certificate issued by the Chartered Accountant having valid UDIN number of the last 3 years. The average turnover is the 50% percent of the tendered amount.
 15. The bidder has to enclose the valid EPF and ESI certificate.
 16. Completion certificate issued by Competent Authority will only be considered. Competent Authority means officer of not below the rank of Executive Engineer/ Equivalent would be acceptable.
 17. Notarized copy of the registered partnership deed.
 18. Valid Registration certificate of enlistment of contractor in the appropriate category in appropriate class as mentioned in above first para.

INTEGRITY PACT

To,

Sub: **15/SE/Civil/2023-24 Construction of VRDL Lab Phase 3 at AIIMS Rishikesh**

Dear Sir,

It is hereby 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 **Construction of VRDL Lab Phase 3 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) / Contract(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) **Performance Guarantee / Security 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, 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:- Submission

Additional Performance Security may be applicable in case of bidder quoted the abnormal below rate which is decided by the competent authority. The abnormal below rate may also be decided by the competent authority and their decision may be final. Bidder/Contractor has also to submit the market rate analysis to carry out the work. Non-submission of the Additional performance guarantee in a stipulated time shall be treated as disqualified from the contract and bidder/contractor may also be debarred for the three years in further participation in any bid of any department AIIMS.

Article 9- 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.

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 एतद्द्वारा 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.....

अनुसूची 'घ' SCHEDULE 'D'

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'

ढके की सामान्य षर्तों का संदर्भ

General conditions of contract for CPWD works 2020 (maintenance work) as amended upto date.

1. Reference to General Conditions of contract

Name of work **Construction of VRDL Lab Phase 3 at AIIMS Rishikesh**

:

कार्य की अनुमानित लागत Estimated cost of work

: ₹ 67,32,974.00

(i) धरोहर राशि Earnest money

: Rs.3,36,649.00 in form of FDR from scheduled bank.

(ii) निष्पादन गारंटी Performance guarantee :

10% of Tendered value. निविदित मूल्य का 03 प्रतिषत

(iii) प्रतिभूति निक्षेप: Security Deposit:

Adjusted in PBG

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 प्रतिषत जिससे अधिक निष्पादित मर्दों के लिए दरों का निर्धारण खण्ड 12.2 और 12.3 के अनुसार होगा

Executive Engineer , AIIMS Rishikesh

निम्नानुसार

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.

see below

Definitions:

2(v) भारसाधक इंजीनियर

Engineer-in-Charge

Executive Engineer, AIIMS Rishikesh

2(viii) स्वीकार कर्ता प्राधिकारी

Accepting Authority

Superintending Engineer, AIIMS Rishikesh

2(x) अतिरिक्त और लाभों को पूरा करने के

लिए श्रम एवं सामग्रियों की लागत पर प्रतिषतता

Percentage on cost of materials and labour to cover all overheads and profits.

15% (Fifteen per cent)

2(xi) दरों की मानक अनुसूची

Standard schedule of Rates for Civil: -

Delhi Schedule of rate 2021(Civil)/Market Rate issued upto date of receipt of tender.

2(xii) विभाग

Department

AIIMS Rishikesh

9(ii) मानक के.लो.नि.वि. ढेका फार्म

Standard CPWD contract Form

CPWD form7 GCC 2020 Maintenance 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

150 (One Fifty) 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 ठेकेदार 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**खण्डClause10C**

Component of labour expressed as Percent of value of work

NA

खण्ड Clause 10CC - NOT APPLICABLE.

<p>खण्ड 10 गग उन सविदाओं पर लागू होगा जिसमें कार्य समापन की अवधि, अमले 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</p>
--

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 & 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 दर 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 25**

Constitution of dispute redressed committee (DRC)

Applicable**खण्ड Clause 32****NA****खण्ड Clause 38**

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

केलोनिवि द्वारा मुद्रित दिल्ली दर अनुसूची 2018 के आधार पर

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

on the basis of Delhi Schedule of Rates 2021 printed by C.P.W.D. with correction slips issued up to date of receipt of tender.

II) अनुमानमूलक मात्राओं में अनुमत विचलन
 Variations permissible on theoretical quantities.

Yes

II) अनुमानमूलक मात्राओं में अनुमत विचलन
 Variations permissible on theoretical quantities.

Yes

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 निविदा में 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.
ख)	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 पूर्वलन 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. Rs. 6210/- Per MT
2.	ईस्पात Steel Reinforcement	N.A. Rs. 53099/- Per M.T.

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;
 - (b) 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	$\pm 6\text{mm}$	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	$\pm 6\text{mm}$	

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	$\pm 6\text{mm}$
(b) In any 6m	$\pm 10\text{mm}$

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.

(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 thisday oftwo thousand and betweenson ofof(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 ten years 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 ten years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for 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 byin 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 AAC Block	Aerocon, Siporex, Ultratech, Ecolite, Concrelite, 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, Harrison, 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, Poincer 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	Vinyl flooring	Armstrong, Gerfloor, Tarkett
86	Variable Frequency Drive	ABB / Siemens / Fuji / Danfoss
87	AHU/ TFA	Citizen / Zeco / VTS / Flaktwood / Systemair / Edgetech
88	Plug Fan	Nicotra Gebhardt / Kruger/ Ziehl-abegg /Greenheck / Flaktwood
89	Motor (IE-3) for AHU Fan	ABB / Siemens / Crompton
90	Filters	Thermadyne / Freudenberg / Camfil Farr / AAF
91	VRV /VRF System	DAIKIN / CARRIER/ TOSHIBA/ MITSUBISHI / HITACHI / OGENERAL
92	Refrigerant Copper Piping	Maxflo / Rajko / Modern
93	GSS/GI Sheet	SAIL / Jindal / TATA
94	Grilles / dampers / diffusers / Louvers / VCD / Fire damper / MotorisedDamper	Ruskin/ Caryaire / Systemair / Cynore / Dynamic Equipments / Airflow / Pineair
95	Fire Damper Actuator	Belimo / Siemens / Honeywell
96	Nitrile Insulation	Armacell / Aflex / Supreme
97	Magnehelic gauge	Dwyer or equivalent
98	Duct Heater	Daspass / KEPL / Equivalent
99	Electrical Panels / Switch gears / Switch Socket / DB	L&T/ ABB/ Schneider/ Siemens/ Legrand/ Tricolite/ Adlec Mundka/ Advance / Equivalent
100	LED Light Fixture	Philips / Crompton / Havells / Orient / Bajaj / Syska
101	Current Transformer	AE/Pragati/Gilbert & Maxwell/Matrix/Rishabh/Kappa
102	Electronic Digital Meter	Enercon System Pvt. Ltd. / CG Schlumberger / L&T / Rishabh
103	Moulded Case Circuit Breaker (MCCB)	Schneider (NSX) / L&T (D Sine) / Siemens (3VL) / ABB (Tmax) / Legrand
104	Miniature Circuit Breakers (MCB).	Schneider / L&T / Siemens / ABB / Legrand/Havells
105	Residual Current Circuit Breaker (RCCB)	Schneider / L&T / Siemens / ABB / Legrand/ Havells
106	Power/Aux. Contactor	Schneider / L&T / Siemens / ABB / Legrand/ Havells
107	Change Over Switch	Schneider / L&T / Siemens / ABB / Legrand/ Havells
108	Meters including Digital Meters	L&T/ Socomec/ Schneider/ Secure/ Siemens/ ABB / Rishabh
109	Protection Relay	Areva/Siemens/L&T/Schneider

110	Indication lamp and push button	GE/L&T/Siemens/Schneider
111	Selector Switch	Siemens/ L&T/ Schneider/ABB
112	Single Phase Preventer	L&T/Minilec/Schneider/ABB
113	LT Cables / Wire	Havells/ Finolex/ KEI/ Polycab/ RRRKabel/Grandlay
114	Bimetallic Cable Lug	Dowell/Comet/Jainson
115	Cable Glands Double Compression.	Dowell/Comet/Jainson
116	DLP PVC Trunking	Legrand/ Havells and equivalent.

Schedule of Quantity

Name of work: Construction of VRDL Lab Phase 3 at AIIMS Rishikesh

Sr No.	Item	Unit	Qty	Rate	Amount
1	<p>Supply and Installation of sandwiched false ceiling of minimum 50 mm thickness both side Epoxy Powder coated (60-80 microns) 0.8mm thick G.I sheets (hot dipped with zinc coating of 120 gsm) with PUF as infill of density not less than 40+/-2 Kg/m³. Necessary stiffeners to be provided as per manufacturer's standard and complete in all respects including supports, hangers, sealants, complete with all accessories as required etc. Ceilings shall include cut-outs for Diffusers, Light fittings.</p> <p>Note:</p> <ol style="list-style-type: none"> 1.All ceiling joints and gaps between panel to panel, ceiling elements (such as Diffusers, light fixtures etc.) to be sealed using silicon sealant. 2.Colour of the ceiling panel: As approved by Engineer-in-Charge. 3.Joint width between panels shall not exceed 3mm. 4.Seperate quantities for the ceiling cut-outs is mentioned in BOQ. 	sqm	124.00		
2	<p>Supply and Installation of sandwiched wall panels of minimum 60 mm thickness both side Epoxy Powder coated (60-80 microns) 0.8mm thick G.I sheets (hot dipped with zinc coating of 120 gsm) with PUF as infill of density not less than 40+/-2 Kg/m³. Necessary stiffeners to be provided as per manufacturer's standard and complete in all respects including in-built MS/PVC conduits in each wall panel for electrical cabling, cut-outs for sockets & switches, Magnehelic Gauges etc. The entire wall panel assembly shall include Aluminium angular connectors between wall panels, Base runners (powder coated G.I.), complete with all accessories as required etc.</p> <p>Note:</p> <ol style="list-style-type: none"> 1.All wall joints and gaps between panel to panel, wall elements(Magnehelic gauge, electrical socket, switch) etc. to be sealed using silicon sealant. 2.Colour of the wall panel: As approved by Engineer-in-Charge. 3.Joint width between panels shall not exceed 3mm. 4.Seperate quantise of wall openings mentioned in BOQ 	sqm	263.00		
3	<p>Factory finished / Site made cut-outs in ceiling panel with necessary reinforcement/C caps, complete with all accessories as required etc. for fixing of Diffusers, Light Fixtures etc.</p>	each	50.00		
4	<p>Factory finished / site made cut-outs in wall panels with necessary reinforcement/C caps, complete with all accessories as required for fixing of electrical switch socket modules, Magnehelic gauges etc.</p>	each	130.00		

5	Supply and installation of extruded aluminium with epoxy powder coated (60-80 micron), clip on type R-50 covings for the entire wall to wall and wall to ceiling joints including all accessories required for fixing. Note: All joints between clean room panels and coving to be sealed using silicon sealant.	meter	400.00		
6	Supply and installation of 3D Internal/External corner coves of aluminium with epoxy powder coated (60-80 micron) suitable for R-50 covings including all accessories required for fixing. Note: All joints between clean room panels and coving to be sealed using silicon sealant.	each	150.00		
7	Supply and Installation of Clean room doors with not less than 46mm thick door leaf and frames equal to 60 mm thickness with properly levelled replaceable view panel/glass. Both side Epoxy Powder coated (60-80 microns) 0.8mm thick G.I sheets(hot dipped with zinc coating of 120 gsm)with PUF as infill of density not less than 40+/- 2 Kg/m3. Door to be provided with necessary stiffeners complete with, not less than 1.2 mm thick epoxy powder coated GI sheet or with anodized aluminium door frames totally flushed with the wall panels, door bottom drop seal/ hinges with lifting arrangement ,SS304 Butt hinges with ball bearings, Double glazed view panel (450x600 mm) with 6mm toughened (with 4 sided bevelled and smooth edges, with moisture traps using silica gel between panes) with double adhesive VHB tapes, SS 304 door closures, both side SS304 'D' handle / push plate with D handle, Both side SS kick plate, SS Lock & key, complete with all accessories as required etc. View Panel: Clear glass vision panel Note: 1.All joints between view panel and door panel to be sealed using silicon sealant. 2.Colour of the door panel: As approved by Engineer-in-Charge. 3. Door accessories make shall be Dorma / Hafele. Single leaf door size: 1200 mm (W) x 2100 mm (H) (minimum 1100 mm clear opening)	each	10.00		
8	Supply and Installation of Clean room doors with not less than 46mm thick door leaf and frames equal to 60 mm thickness with properly levelled replaceable view panel/glass. Both side Epoxy Powder coated (60-80 microns) 0.8mm thick G.I sheets(hot dipped with zinc coating of 120 gsm)with PUF as infill of density not less than 40+/- 2 Kg/m3. Door to be provided with necessary stiffeners complete with, not less than 1.2 mm thick epoxy powder coated GI sheet or with anodized aluminium door frames totally flushed with the wall panels, door bottom drop seal/ hinges with lifting arrangement ,SS304 Butt hinges with ball bearings, Double glazed view panel (450x600 mm) with 6mm toughened (with 4 sided bevelled and smooth edges, with moisture traps using silica gel between panes) with double adhesive VHB tapes, SS 304 door closures, both side SS304 'D' handle / push plate with D handle,	each	1.00		

	<p>Both side SS kick plate, SS Lock & key, complete with all accessories as required etc. View Panel: Clear glass vision panel Note: 1.All joints between view panel and door panel to be sealed using silicon sealant. 2.Colour of the door panel: As approved by Engineer-in-Charge. 3. Door accessories make shall be Dorma / Hafele. Single leaf door size: 1100 mm (W) x 2100 mm (H) (minimum 1000 mm clear opening)</p>				
9	<p>Supply and Installation of Clean room doors with not less than 46mm thick door leaf and frames equal to 60 mm thickness with properly levelled replaceable view panel/glass. Both side Epoxy Powder coated (60-80 microns) 0.8mm thick G.I sheets(hot dipped with zinc coating of 120 gsm)with PUF as infill of density not less than 40+/- 2 Kg/m³. Door to be provided with necessary stiffeners complete with, not less than 1.2 mm thick epoxy powder coated GI sheet or with anodized aluminium door frames totally flushed with the wall panels, door bottom drop seal/ hinges with lifting arrangement ,SS304 Butt hinges with ball bearings, Double glazed view panel (450x600 mm) with 6mm toughened (with 4 sided bevelled and smooth edges, with moisture traps using silica gel between panes) with double adhesive VHB tapes, SS 304 door closures, both side SS304 'D' handle / push plate with D handle, Both side SS kick plate, SS Lock & key, complete with all accessories as required etc. View Panel: Clear glass vision panel Note: 1.All joints between view panel and door panel to be sealed using silicon sealant. 2.Colour of the door panel: As approved by Engineer-in-Charge. 3. Door accessories make shall be Dorma / Hafele. Single leaf door size: 900 mm (W) x 2100 mm (H) (minimum 800 mm clear opening)</p>	each	1.00		
10	<p>Supply and installation of replaceable type double glazed view panels/glass on 60 mm thick wall panel properly levelled with 2 no's of 6 mm thick toughened (4 sided bevelled and with smooth edges) flushed with the wall panel with double adhesive VHB tapes. Silica gel to be introduced between glazing to avoid ingress of humidity and all joints to be sealed with silicon sealant, complete with all accessories as required etc.</p>	sqm	15.00		
	SPLIT AC WORK				
11	<p>Supply, Installation, Testing and Commissioning of 2 TR Split AC 3 Star Inverter Type Hot & Cold with indoor unit, outdoor unit, wireless remote, 3 metre copper pipe with insulation & 3 metre suitable electrical cable for indoor to outdoor unit, drain pipe etc. as per OEM standard. AC's shall have copper evaporator coil & copper condenser coil. Make- Mitsubishi, Daikin, Hitachi & as approved by Engineer in-charge</p>	Nos.	3.00		
12	<p>Supply, Installation, Testing and Commissioning of 1.5 TR Split AC 3 Star Inverter Type Hot & Cold with</p>	Nos.	5.00		

	indoor unit, outdoor unit, wireless remote, 3 metre copper pipe with insulation & 3 metre suitable electrical cable for indoor to outdoor unit, drain pipe etc. as per OEM standard. AC's shall have copper evaporator coil & copper condenser coil. Make- Mitsubishi, Daikin, Hitachi & as approved by Engineer in-charge				
13	Supply, Installation, Testing and Commissioning of extra Copper pipe (standard quality) both suction and discharge pipes inclusive i.e. ½" & ¾" copper pipes with individual nitrile rubber sleeve type 9 mm thick insulation for discharge and suction pipes, all required accessories etc.	Meter	40.00		
14	Supply and fixing of PVC pipe for condensate water drain line with proper clamping, with all required accessories etc.. Drain line shall be not less than 1 Inch dia PVC pipe and it has to be connected between split AC indoor unit and to the nearest drainage point as per the site condition.	Meter	60.00		
15	Supply and fixing of electric copper power cable of 2.5 sq. mm 4 core with all required accessories etc. Make: Havells, Polycab, KEI & as approved by Engineer in-charge	Meter	45.00		
16	Supply and fixing of pre-fabricated outdoor unit stand (Wall mount/floor mount) with all required accessories etc. as per site condition.	Nos.	6.00		
	FIRE DETECTION AND ALARM SYSTEM				
17	Supplying, installation, testing & commissioning of heat detector operating at 54°C/57°C with rate of rise cum fixed temperature (dual thermistor) type with mounting base complete with all connection etc. as required.	Each	4.00		
18	Supplying, installation, testing & commissioning of smoke detector with built-in LED and mounting base complete with all connections etc. as required.	each	48.00		
19	Supplying, installation, testing & commissioning of manual call boxes of MS construction in surface/ recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required.	each	3.00		
20	Supplying, installation, testing & commissioning response indicator on surface/ recess MS box having two LEDs metallic cover complete with all connections etc. as required.	each	26.00		
21	Supplying, installation, testing & commissioning fire alarm sounder with facility to make announcement, mounted in M.S. box (16 SWG) with hinged cover plate & suitable for operation with amplifier i/c line matching transformer etc. complete as required.	each	3.00		
22	Supplying, installation, testing & commissioning sector panel suitable for following zones, complete with visual indications for short circuit fault, open circuit fault, fire condition and all other standard facilities as per IS:2189 with mimic diagram for all area/ zone covered, complete with all connections, interconnections as required. 4 zone	each	1.00		
23	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel	meter	243.59		

	wire armouring & FRLS outer sheath complete as required				
	Electrical Item				
24	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 modular switch, modular plate, suitable GI /PVC box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Group C	Point	52.00		
25	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	meter	245.00		
26	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 2 X 4 sq. mm + 1 X 4 sq. mm earth wire	meter	1398.00		
27	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 2 X 10 sq. mm + 1 X 6 sq. mm earth wire	meter	11.00		
28	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 4 X 10 sq. mm + 2 X 6 sq. mm earth wire	meter	22.00		
29	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	each	50.00		
30	Supplying and fixing suitable size GI 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.	each	80.00		
31	Supply, installation, testing and commissioning of exhaust fan in the existing opening, including making good the damage connection with existing light point/ fan point/ exhaust fan point/ call bell point with 3 x1.5 sq.mm flexible FRLS PVC insulated, copper conductor cable, body earthing and sundry materials complete with testing, commissioning etc.as required following specifications Size of fan (in mm) 300,Number of pole (in Nos.) 4,Number of blades 3,Rated voltage 230 V, 50 HZ, AC, Single Phase Upto 450 mm sweep	each	3.00		
32	Supply, installation, testing and commissioning of ceiling mounted down lighter LED fittings 2X2 square shape 36 W connection with existing light point/ fan point/ exhaust fan point/ call bell point with 3 x1.5 sq.mm flexible FRLS PVC insulated, copper conductor cable, body earthing and sundry materials complete with testing, commissioning etc.as required following specifications Main housing : CRCA,internal wiring : Industrial Grade Copper wire,hardware : SS / MS,Ingress protection	Nos.	34.00		

	: IP20,lumen maintenance : 50000HR@70,Operating temperature : (0-50) Deg. C,Rated voltage & frequency : 240, 50hz AC,Wattage : 36 Watt,PF : >=0.95, ITHD,<10%,Luminous efficacy (lm/w) : >=120,CCT : >5700K, CRI : >80,operating voltage : 140V - 300V,Lumen (lm) : 4000-4400,Surge Protection : >=2KV,Size MM : L 595 X W 595 X H (60 to 80),Mounting :suitable for Armstrong/Grid ceiling,Driver location : External				
33	Supply, installation, testing and commissioning of ceiling mounted 15 Watt Round Slim Led Panel connection with existing light point/ fan point/ exhaust fan point/ call bell point with 3 x1.5 sq.mm flexible FRLS PVC insulated, copper conductor cable, body earthing and sundry materials complete with testing, commissioning etc.as required following specifications, 15 Watt Round Slim Led Panel,Rated voltage -240V AC,Frequency- 50Hz,Wattage - 15 Watt, Power factor - 0.9 , CCT - 6500K, Lumen Maintenance - 50000 Hrs. Main housing - Excellent Thermally Managed Pressure Die cast Alluminium, Front Cover - Polycarbonate Diffuser,Cut out - 180 mm, Mount Type - Recess,Industrial type	Nos.	5.00		
34	Supply, installation, testing and commissioning of 4 ft. surface LED fitting 18-20 watt connection with existing light point/ fan point/ exhaust fan point/ call bell point with 3 x1.5 sq.mm flexible FRLS PVC insulated, copper conductor cable, body earthing and sundry materials complete with testing, commissioning etc.as required following specifications.2000 lumens full glow, powder coated aluminium die cast housing, with high efficiency diffuser, CCT 5700-6500, system efficacy output not less than 110 lumens / watt, with electronic driver having PF>0.95 and THD < 10%, complete with electronicdriver, 50000 hrs burning for lifetime.	Nos.	10.00		
35	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. 12 way , Double door	each	1.00		
36	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 tinnedcopper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. & as directed by Engineering Incharge. 8 way (4 + 24), Double door	each	1.00		
37	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 tinnedcopper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. & as directed by	each	1.00		

	Engineering Incharge. 12 way (4 + 36), Double door				
38	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. Single pole	each	72.00		
39	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. Double pole	each	1.00		
40	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, Molded Case Circuit Breaker (MCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required & as directed by Engineering Incharge. 63A	each	2.00		
41	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required & as directed by Engineering Incharge.	each	8.00		
42	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	1.00		
43	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	meter	25.00		
44	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. suspenders etc as required. 150 mm width X 50 mm depth X 1.6 mm thickness	meter	5.00		
45	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. suspenders etc as required. 300 mm width X 50 mm depth X 1.6 mm thickness	meter	5.00		
46	Supply, installation, testing and commissioning of 10KVA (3Ph-3Ph) Online UPS System with Inbuilt isolation Transformer-360V,12V/26AH -30 No's Batteries for 30Min Battery Backup and Battery Rack & Interlink Cables connection, testing,	Nos.	1.00		

	commissioning etc. as required & as directed by Engineering Incharge.				
47	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 125 A,36KA,FPMCCB	each	1.00		
48	Providing and laying Autoclaved Aerated concrete (AAC) blocks masonry with 150mm/230mm/300 mm thick with Grade-I AAC blocks of density 551 to 650 kg/ cum conforming to IS: 2185 (Part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for seperately).	cum	13.00		
49	12 mm cement plaster of mix :1:6 (1 cement: 6 fine sand)	sqm	270.00		
50	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	270.00		
51	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour Two coats	sqm	270.00		
52	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) 25mm thick	sqm	200.00		
53	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	100.00		
54	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	30.00		
55	Providing and fixing glazing in aluminium door,	sqm	60.00		

	window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)				
56	Providing and fixing 12 mm thick prelaminate particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge Pre-laminated particle board with decorative lamination on both sides	sqm	18.00		
57	Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Casement window double panels with top fixed with S.S. friction hinges (350 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 2.50 sqm)	sqm	45.00		
58	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	5.00		
59	Demolishing koba in terracing and disposal of material within 50 metres lead.	cum	2.00		
60	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level Thermo-Mechanically Treated bars of grade Fe-500D or more	kg	110.00		

61	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarsesand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	cum	1.50		
62	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :	sqm	120.00		
63	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	1.00		
64	Providing and fixing to existing door frames. 25 mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762 mm X 25 mm or less as per requirement with an average wall thickness of 1 mm (± 0.3 mm). PVC foam end cap of size 23x10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm. M.S. tube having dimensions 19 mm x 19 mm and 1.0 mm (± 0.1 mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25 mm X 11 mm. Door shutter shall be reinforced with special-polymeric reinforcements as per manufacturer's specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	sqm	5.00		
65	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be	meter	15.00		

	reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in-Charge.				
66	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matching pigments etc., complete.	sqm	35.00		
67	Providing and fixing uPVC SWR pipes conforming to IS:13592-92 Type B, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	meter	40.00		
68	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	each	2.00		
69	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 Flat back wash basin size 450x300 mm with single 15mm C.P. brass pillar tap	each	2.00		
70	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.20 mm nominal outer dia Pipes	meter	80.00		
71	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore	each	2.00		
72	Providing and fixing wall mount health faucet of chrome finish, handle material of ABS, of approved quality conforming to IS standards and weighing not less than 250 gms with 1.2metre long pvc tube and hook.	each	2.00		
73	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.(b) Second layer of slurry of cement @ 0.242 kg/sqm	sqm	10.00		

	<p>mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.</p>				
74	<p>Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in order and as directed and specified by the Engineer-in-Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.</p>	sqm	122.00		
75	<p>Providing 2 mm thick ,PVC Vinyl flooring RQ Restorable Quality with a single layer of PVC, total weight is 2800 gm/m², PUR (polyurethane reinforced, Abrasion group T: ≤4.00 mm, residual indentation approx. 0.03 mm, castor wheel test qualified, dimensional stability ≤0.40%, static electrical charge < 2kv, impact sound reduction approx +4db, good resistance of scratch, slip, chemical and fire, doesn't favor in growth of fungi & bacteria. Clean Room class A certified. 100% recyclable. Low VOC emissions after 28 days of installation (lower than ≤10µg/m³). Phthalate Free of any colour and welding required at joints as per direction of Engineer-in-charge.</p>	sqm	190.00		

76	Self levelling of cement concrete flooring with desired chemicals as per direction of Engineer-in-charge	sqm	190.00		
77	Extra for providing PVC coving work on edges/corners of room to avoid growth of microorganism by rounding of edges/corners. Corridor	meter	150.00		
78	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete : 300x16mm	each	10.00		
79	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete 300x10mm	each	10.00		
80	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :125mm	Each	20.00		
81	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	each	10.00		
82	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour 15 mm nominal bore with 45 cm length	each	6.00		
83	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete Flexible pipe 32mm dia	each	2.00		
84	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	2000.00		
85	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete 15 mm nominal bore	each	4.00		
86	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	450.00		
87	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	sqm	150.00		
88	Providing & Fixing multiwalled (multiwall) thermo clear glass look type 16mm thick clear of required color. Poly carbonate sheet of required brand such as durotuff, Bayers or equivalent or approved by engineer in charge. The poly carbonate sheet shall be fixed on tubular sheet structure/truss with the whole structure water tight as per approved design/drawings. The polycarbonate sheet and profile shall be fixed with self tapping and self drilling 50mm long steel screws of HP brand fixed not more than 150mm centre to centre. The cost	sqm	30.00		

	also include the rate of labour required for cutting and fixing of polycarbonate sheet in position required during execution of work. The work shall be completed in all respect as per design/drawings and direction of engineer in charge.				
	TOTAL AMOUNT				67,32,974.00