

Name of Work: Renovation of old school for conversion in labs at MNIT Campus, Jaipur.

NIT No. MNIT/NIT/2017-18/38

# **BID DOCUMENT**

Registrar, Malaviya National Institute of Technology, Jaipur (Raj)

# Name of work: Renovation of old school for conversion in labs at MNIT Campus, Jaipur.

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# Malaviya National Institute of Technology Jaipur

#### 1. PRESS NOTE

The Registrar, Malaviya National Institute of Technology, Jaipur, invites sealed item rate composite tenders from the reputed contractors registered in CPWD, PWD, MES, PSUs and other Govt. / semi govt organizations under valid category for the following work:

1. Name ofwork Renovation of old school for conversion in labs at MNIT

Campus, Jaipur.

Composited Estimated cost Civil: Rs.22,16,500.00

Electrical: Rs.5,56,500.00 Total: Rs.27,73,000.00

Earnest Money Rs.55,460.00

Cost of tender Documents Rs. 1000.00, to be deposited in the form of separate DD

with EMD. Document is available on institute web site

www.mnit.ac.in

Period for completion 06 months

Last Date & time for submission of 22.02.2018 Up to 2:00 pm

tender

Opening of tender 22.02.2018 at 3:30 pm

The contractors registered in CPWD, PWD, MES, PSUs, other Government and semi Government organization under appropriate category to participate in the tender of above description may apply. The registration / enlistment of the contractors shall be valid on the last date of submission of tender. In case the last date of submission is extended, the enlistment/registration of contractor shall also be valid upto extended date of submission.

The tenderer shall submit attested copied of their registration/enlistment certificate along with tender document. The original copies of registration/enlistment certificate might be called upon by the Registrar, MNIT at any time after the opening of tender. The Registrar reserves the right to verify the documents for his full satisfaction including sending of the same to respective issuing department for verification of authenticity. Any information furnished by tenderer found incorrect will attract stringent legal action against him upto the extent to debar him from tendering in future and forfeiture of entire EMD and performance security.

Earnest money shall be deposited at the time of submission of tender documents. The earnest money shall be in the form of Demand Draft/ Banker's cheque of a scheduled bank issued in favour of Registrar, MNIT, Jaipur.

The successful tenderer shall have to submit a performance guarantee of 5% (Five percent) of the composite tendered amount in the appropriate form as given in PWD-6 attached with tender document within 15 days of issue of letter of acceptance.

The complete set of tender documents is available at MNIT's website www.mnit.ac.in and may be downloaded from there.

Signature of Tenderer(s)

#### 2. INFORMATION AND INSTRUCTIONS TO CONTRACTORS

The contractor submitting the tender should read the schedule of quantities, additional & special conditions, additional specification, particular specification and other terms and given in the NIT and drawings. The tenderer should also read the General Conditions of contract for CPWD Works 2010 amended upto correction slip no. **DGW/CON/277 dated 03/12/2013**, which is available as Govt. of India Publications. However provisions included in the tender document shall prevail over the provisions contained in this standard form. The contractor should also visit the site of work and acquaint himself with the site and soil conditions before tendering. The following conditions which already form part of the tender conditions are specially brought to his notice for compliance while filling the tender. They are requested to comply following.

- 1. The main contractor shall execute the electrical works also. He shall be either an eligible contractor himself or associate with himself an eligible electrical contractor for execution of electrical works as Para 16.1.1 The contractor shall submit the name(s) of agency valid in appropriate class eligible to bid of the minor component of work before the issue of letter of acceptance.
- 2. After acceptance of the bid by competent authority, the Registrar, MNIT shall issue letter of award. After the work is awarded, the main contractor will have to enter into one agreement with Registrar, MNIT and has also to sign two or more copies of agreement depending upon number of Ex.En's of major & minor components. Registrar MNIT will operate complete agreement including major & minor components of work.
- 3. Tenders with any conditions including that of conditional rebates and use of correction fluid anywhere in the tender document shall be rejected forthwith. Such tenders shall be entered in tender opening register but these shall neither be read out nor entered in the tender opening register at the time of opening of tender.
- 4. The rate(s) must be quoted in decimal coinage. Amount must be calculated and rounded in full Rupees by ignoring fifty paise and considering more than fifty paise as rupees one. Rates must be quoted both in words & figures. Amounts should be worked out for all the items. Rates in words should start with word Rs. And finish with word "only" and there shall not be undue gap in the words of the rates.
- 5. The successful tenderer shall be required to submit a Performance Guarantee of 5% (Five percent) of the composite contract amount within a period of issue of letter of acceptance as specified in schedule 'F'. This period can be further extended by Registrar upto a maximum period of 7 days (with late fee @0.1% per day of Performance Guarantee amount) days on written request of the contractor.
- 6. The contractor shall have to execute guarantee bonds in respect of water supply and sanitary installation works and water proofing works as per Performa at Annexure III & IV.
- 7. GST/Sales tax/VAT, purchase tax, turn over tax, Excise duty, work contract tax or any other tax / CESS on materials/Labour as applicable shall be paid by the contractor himself. The contractor shall quote his rates considering all such taxes.
- 8. Attention is also drawn to Clauses 6, 6A and 1 to 15 with of General Condition of Contract for CPWD works 2010, which prescribes the procedure for computerized recording of measurement and preparation of bill by contractor.

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Registrar, MNIT, Jaipur

#### 3. NOTICE INVITING TENDER

Item rate composite tender consisting of two components (Civil including civil services & Electrical including some Electrical services) are invited from approved and eligible contractors registered in CPWD, PWD, MES, PSUs and other Govt. / semi govt organizations for. **Renovation of old school for conversion in labs at MNIT Campus, Jaipur.** 

1. The enlistment of the contractors shall be valid on the last date of submission of tender. In case the last date of submission of tender extended, the enlistment shall be valid upto extended date of submission.

1. The work is estimated to cost **CIVIL** : Rs. 22,16,500.00

ELECTRICAL :Rs. 5, 56, 500.00 TOTAL :Rs. 27, 73, 000.00

- 2. This estimated cost is however merely a rough guide.
- 3. The Registrar, MNIT, will deal with all matters relating to the invitation of tenders.
- 4. The eligibility of tenderer will correspond to the combined estimated cost of different components put to tender.
- 5. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD- 8 which is available as a Govt. of India Publication. Tenderers shall quote his rates as per various terms and conditions of the said form which will form part of the agreement. However the provisions included in tender documents shall prevail over the corresponding provision contained in standard CPWD form no.8.
- 6. The time allowed for carrying out the work will be **06** (**Six**) Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 7. The site for the work is available.
- 8. The architectural and structural drawing shall be made available in phased manner, as per requirement of the same as per approved program of completion submitted by the contractor after award of the work.
- 9. Bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms & conditions of contract to be complied with and other necessary documents including Standard General Conditions of Contract Form can be seen and downloaded at free of cost from website www.mnit.ac.in .
- 10. Tenders shall be accompanied with Earnest money as mentioned in NIT @ 2% of composite estimated cost in form of Demand Draft/ Banker's cheque of a scheduled bank issued in favour of Registrar, MNIT, Jaipur, having validity for 3 months or more from the last date of receipt of tenders.
- 11. The tender fee/cost of tender documents as mentioned in NIT shall be deposited with tender submission in form of Demand draft/Banker's cheque of scheduled bank separately from DD/banker's cheque of EMD,.
- 12. The registration/enlistment certificates, DD/Bankers' cheque of tender fee and the earnest money shall be kept in an envelope and marked as "EMD & Registration". The tender document shall be placed in another envelop marked as "TENDER". Both of these two envelops shall be submitted together in another sealed envelope marked with name of work, date & time of opening and shall be submitted to Registrar, MNIT addressing "The Registrar, Malaviya National Institute of Technology, JLN marg, Jaipur (Raj.)-302017". Upto 2:00 pm on 22.02.2018 and will be opened by him or his authorized representative in his office on the same day at 3:30 PM. The envelope marked as "TENDER" of only those tenderers

Signature of Tenderer(s)

- shall be opened, whose earnest money and registration certificates, placed in other envelope, is found correct.
- 13. The Contractor, whose bid is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the composite tendered amount within the period specified in Schedule "F". This guarantee shall be in the form of banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank or Guarantee Bonds of any Scheduled bank in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 14. 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 tender. A tenderer 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 tenderer 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 tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 15. The Registrar, MNIT, Jaipur does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 16. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 17. The Registrar, MNIT, Jaipur reserves the right of accepting the whole or any part of the tender and the bidders shall be bound to perform the same at the rate quoted.
- 18. The contractor shall not be permitted to bid for works in the MNIT responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the MNIT or in the Ministry of Human Recourses & Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of MNIT.
- 19. The bid for the works shall remain open for acceptance for a period of Ninty (90) days from the date of opening of eligibility bid. If any bidders withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Registrar, MNIT shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said

- earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
- 20. This notice inviting Tender shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
  - a. The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- 21. The Registrar, MNIT will call tenders for the composite work. The cost of Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
- 22. The main contractor shall execute the minor component of work also i.e. electrical component. He should be either an eligible electrical contractor himself or he may associate eligible electrical contractor of appropriate class based on estimated cost of electrical component, before the issue of letter of acceptance. The name of agency for minor component of work shall be approved by the Registrar, MNIT.
- 23. It will be obligatory on the part of the main contractor to tender and sign the tender documents for all components.
- 24. In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Registrar. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Registrar is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 25. On the acceptance of composite tender the letter for commencement of work shall be issued by the Registrar to main contractor for entire composite work. The main contractor has to enter into agreement with contractor(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to Registrar as well as to EE in charge of major component. In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.
- 26. In case the main contractor fails to associate agency for execution of minor component with in prescribed time or furnish incomplete details or furnish detail ineligible agency even after the tenderer is given due opportunity, the entire scope of minor component shall be withdrawn from the tender and the same shall be got executed by the Registrar at the risk & cost of main contractor.
- 27. All running and final bill payments for the major component shall be made by Registrar to the main contractor. Running & final bill payment for minor components shall also be made by the Registrar directly to the main contractor.
- 28. Tenders with any condition including that of conditional rebates in the tender document shall be rejected forthwith.
- 29. The rate (s) must be quoted in decimal coinage. Contractor must ensure to quote rate of each item clearly. If the column / space specified to quote the rate found blank and no rate is quoted by the bidder, the rate of such item shall be treated as "0" (Zero)
- 30. The contractor shall have to execute guarantee bonds in respect of water supply and sanitary installation works and water proofing works as per Performa at Annexure III & IV.

- 31. The main contractor will give detailed execution program of the work which will form part of this agreement with the department. He will indicate in the program, the time/stage of the work when the agencies of minor component will be deployed by him.
- 32. The main contractor shall be responsible for acts of commission and non-commission of the electrical contractor associated by him as per the above condition.
- 33. Completion certificate of composite work shall be recorded by the Registrar on the written recommendation of Engineers-in-charge of both major & minor component of work.
- 34. Security Deposit @5% (Five percent) of the gross amount of bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money amounts to security deposits @5% of accepted composite tendered amount of the work. Security deposit on civil & electrical part shall be deducted collectively.
- 35. A provision of Integrity Pact (IP) was introduced in GCC-2010. In the OM it is mentioned that at the time of submission of bid, it shall be mandatory to sign the pact by the bidder failing which the bidder will stand disqualified from the tendering process and such bid would be summarily rejected.

Registrar, MNIT, Jaipur.

# 4. INTEGRITY PACT

To,
Sub: NIT No
Name of work : for the work
Dear Sir,
It is here by declared that MNIT 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 bidder/ 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 MNIT.
Yours Faithfully,
Registrar, MNIT, Jaipur(Raj)

## **INTEGRITY PACT**

To,	
Registrar, MNIT, Jaipur(Raj)	
Sub: Submission of Tender for the work of _	
Dear Sir,	

I/We acknowledge that MNIT 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 MNIT. 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, MNIT shall have unqualified, absolute and unfettered right to disqualify the bidder/bidder and reject the tender/bid is 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 MNIT.

#### INTEGRITY AGREEMENT

This Integrity Agreement is made	at on this day of 2014
	BETWEEN
referred as the 'Principal/Owner context hereof include its success.	AND
	ress of the Individual/firm/Company)
throughduly authorized signatory)	(Hereinafter referred to as the (Details of
"Bidder/Contractor" and which hereof include its successors and	expression shall unless repugnant to the meaning or context permitted assigns)
	Preamble
(hereinafter referred to as "Tende	ner has floated the Tender (NIT No)  er/ Bid") and intends to award, under laid down organizational work)
hereinafter referred to as the "Con	ntract".
land, rules, regulations, economic with its Bidder(s) and Contractor AND WHEREAS to meet the pu Integrity Agreement (hereinafter	repose aforesaid both the parties have agreed to enter into this referred to as "Integrity Pact" or "Pact"), the terms and e read as integral part and parcel of the Tender/Bid documents
NOW, THEREFORE, in parties hereby agree as follows an	consideration of mutual covenants contained in this Pact, the ad this Pact witnesses as under:
<b>Article 1: Commitment of the P</b>	

(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.

(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to

observe the following principles:

(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

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Signature of Tenderer(s)

- 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 participate 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.
  - (e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose (with each tender as

per Performa enclosed) any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

- (3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- (5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

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

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

- (1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- (2) Forfeiture of EMD/Performance Guarantee/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/ holiday 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 Subcontractors/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, MNIT.

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

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Registrar office**, which 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 intensions.

(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 thereof shall not be subject to arbitration.

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

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

# 5. FORM OF PERFORMANCE SECURITY (GUARANTEE) BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called "The Government") having
offered to accept the terms and conditions of the proposed agreement between
Contractor(s)") for the work
called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for
$Rs. \hspace{1cm} \hbox{only) as a security/guarantee from the} \\$
contractor(s) for compliance of his obligations in accordance with the terms and conditions in
the said agreement.
1. We, (hereinafter referred to as "the Bank") hereby undertake
to pay to the Government an amount not exceeding Rs
(Rupees Only) on demand by the Government.
2. We,(indicate the name of the Bank) do hereby undertake to
pay the amounts due and payable under this guarantee without any demure, merely on a
demand from the Government stating that the amount claimed as required to meet the
recoveries due or likely to be due from the said contractor(s). Any such demand made on the
bank shall be conclusive as regards the amount due and payable by the bank under this
Guarantee. However, our liability under this guarantee shall be restricted to an amount not
exceeding Rs(Rupeesonly)
3. We, the said bank further undertake to pay the Government any money so demanded
notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding
pending before any court or Tribunal relating thereto, our liability under this present being
absolute and unequivocal. The payment so made by us under this bond shall be a valid
discharge of our liability for payment there under and the Contractor(s) shall have no claim
against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the
guarantee herein contained shall remain in full force and effect during the period that would be
taken for the performance of the said agreement and that it shall continue to be enforceable till
all the dues of the Government under or by virtue of the said agreement have been fully paid
and its claims satisfied or discharged or till Engineering-Charge on behalf of the Government

Signature of Tenderer(s)

carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We,
Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (indicate the name of the Bank) lastly undertake not to evoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid up tounless extended on demand by the Government.
Notwithstanding anything mentioned above, our liability against this guarantee is restricted to
Rs (Rupees) and unless a claim in writing is lodged with
us within six months of the date of expiry or the extended date of expiry of this guarantee all
our liabilities under this guarantee shall stand discharged.
Dated theday offor(indicate the name of the Bank)

certified that the terms and conditions of the said agreement have been fully and properly

# **AFFIDAVIT**

I / We have submitted a ba	nk guarantee for the work	(Name
of work) Agreement No		
Dated	from	(Name of
the Bank with full address)	to the Registrar MNIT, Jaipur with a vio	ew to seek exemption from
payment of performance gu	uarantee in cash. This Bank guarantee ex	epires on
I / We undertake to keep th	e validity of the bank guarantee intact b	y getting it extended from
time to time at my / our ow	n initiative upto a period of	months
after the recorded date of c	ompletion of the work or as directed by	the Engineer in charge.
I / We also indemnify the Obank guarantee if any.	Government against any losses arising ou	nt of non encasement of the
(Deponent) Signature of Contractor		
Note : The affidav	it is to be given by the Executants befo	ore a first class Magistrate.

#### **PROFORMA**

(Annexure-IA)

#### 6. PROPOSAL FOR ASSOCIATING ELECTRICAL AGENCIES

We hereby propose the following electrical agency(s) as per details mentioned against each. Their consent letters are also attached as per Annexure-IIA.

- 1. Name of Electrical contractor:
- 2. Category & class of registration :
- 3. Name & address of enlisting authority:
- **4.** Registration No. (attach copy of registration):
- **5.** Financial limit of work:
- **6.** Validity of registration:
- 7. Consent letter(Attach)

	Contractor Signature
	(Anneyure-IIA)

#### **CONSENT LETTER**

I/We hereby give my / our consent to work as electrical contractor till the completion of work and I/we will be responsible for necessary action to hand over the work and for rectification of defects and repair during the maintenance period. I/we will execute the work as per CPWD specification and addition specifications and conditions of the works.

I/we will also engage suitable Engineer for the work as per condition of contract. I further certify that the particulars pertaining to me are correct.

**Signature of Electrical Contractor** 

# **Malaviya National Institute of Technology Jaipur**

State - Rajasthan

# **Item Rate Tender & Contract for Works**

(A).	Tender for the work of :	
i)	To be submitted <b>by 02.00 P.M. on 22.02.2018</b> to The Registrar, Malaviya Institute of Technology, Jaipur	ı National
ii)	To be opened in presence of tenderers who may be present at <b>3.30 p.m. on 2</b> 2. In the office of The Registrar, Malaviya National Institute of Technology Jaipu	
Issued	d to : (contractor)	
Signat	ture of officer issuing the documents	
Design	rnation	
Date o	of Issue:	

#### **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 document and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Director, Malaviya National Institute of Technology, Jaipur 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-I 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 submission thereof and not to make any modifications in its terms and conditions.

A sum of **Rs 55460/-** is hereby forwarded in Demand draft / Deposit at call Receipt of a Schedule Bank as earnest money. If I/we, fail to commence the work specified I/we agree that the said Director, Malaviya National Institute of Technology, Jaipur or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule `F' and those in excess of that limit at the rates to be determined in accordance with the provision containing in Clause 12.2 and 12.3 of the tender form.

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

I/we agree that should I/we fail to commence the work specified in the above memorandum an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Institute and the same may at the option of the competent authority on behalf of the Director of the Institute be recovered without prejudice to any other right or remedy available in law out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/ us under this contract or otherwise.

Dated	
	Signature of Contractor
	Postal Address:
Witness:	
Address:	
Occupation:	

# **ACCEPTANCE**

The above tender (as modified by you as provided by the provid	led in the letters mentioned hereunder) is
accepted by me for and on behalf of the Director,	Malaviya National Institute of Technology,
Jaipur for a sum of Rs	
(Rupees	only)
The letters referred to below shall form part of this of	contract Agreement :-
a)	
b)	
c)	
	For & on behalf of the Director Malaviya National Institute of Technology, Jaipur
	Signature
Dated	Designation - Registrar, MNIT

#### **8. General Rules & Directions**

- 1. In the event of tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act' 1952.
- 2. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm in which case the receipts must be signed in the name of the firm by one of the partners or by some other person having due authority to give effectual receipts for the firm.
- 3. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates will be summarily rejected. Tender shall have the name and number of the works to which they refer, written on the envelopes.
  The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and less and considering more than fifty paisa as rupee one.
- 4. The officer inviting tender or his duly authorized assistant will open tenders in the presence of intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money forwarded therewith shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other related documents. In the event of a tender being rejected, the earnest money forwarded with such unaccepted tender shall thereupon be returned to the contractor remitting the same, without any interest.
- 5. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 6. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgement or payment to the officer inviting tender and the contractors shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized cashier.
- 7. The memorandum of work tendered for and the schedule of materials to be supplied by the Institute and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
- 8. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender document drawings or other records connected with the work given to them.
- 9. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below / above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise provided be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In the event no rate has been quoted for any item (s), leaving space both in figure(s), word (s), and amount blank, it will be presumed that the contractor has included the cost of this/these item (s) in other items and rate for such items (s) will be considered as zero and work will be required to be executed accordingly.
- 10. In the case of any tender where unit rate of any item/ items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.
- 11. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word `Rs' should be written before the figure of rupees and word `P' after the decimal figures, e.g. Rs. 2.15 P and in case of words, the word `Rupees' should precede and the word `Piase' should be written at the end. Unless the rate is in whole rupees and followed by the word `only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word `only' should be written closely following the amount and it should not be written in the next line.
- 12. (i) The Contractor whose tender is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within specified period. This guarantee shall be in the form of Govt. Securities or fixed deposit receipt of any scheduled bank or State Bank of India.
  - (ii) The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for fulfillment of his contract, an amount equal to 5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills of the contractor at the rates mentioned above and the earnest money if deposited in cash at the time of tenders will be treated as a part of the Security deposit. The Security amount will also be accepted in cash or in the shape of Govt. Securities. Fixed Deposit Receipt of a Scheduled Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed.
- 13. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-charge shall be communicated in writing to the Engineer-in-charge.
- 14. Sales-tax, purchase tax, turnover tax, service tax, VAT,GST, Octroi or any other tax / CESS in respect of this contract shall be payable by the contractor and Institute will not entertain any claim whatsoever in respect of the same.
- 15. The contractor shall give a list of employees of MNIT Jaipur related to him.
- 16. The tender for the work shall not be witnessed by contractors who himself/ themselves has/ have tendered or who may and has/ have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.

- 17. The tender for composite work includes in addition to building work all other works such as sanitary and water supply installations drainage installation, electrical work, air-conditioning work, horticulture and landscape work, roads and paths and fire fighting etc.

  The tenderer must associate himself with agencies of appropriate class which are eligible to tender for such works.
- 18. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Director may in his discretion without prejudice to any other right or remedy available in law cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
- 19. Since this is a composite tender, item/ items of same nomenclature may appear under different sub-heads. The contractor has to ensure that for such identical items, the rates quoted are same at all the places. In case any variation in the quoted rates is found for such items, the lowest of all such quoted rates will be taken as the tendered rate for that particular item, and the tender will be evaluated accordingly.

#### 9. ADDITIONAL CONDITION FOR MISUSE OF PAYMENT RECEIVED AGAINST ADVANCE PAYMENTS

- 1. Till the work is almost completed to the satisfaction of Engineer-in-charge,
- (i) Contractor shall not divert any advance payments or part thereof for any purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and / or for work done during interim stages, etc.) are required to be reinvested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
- (ii) All running account bills preferred by the contractor for advance payments shall be processed only if Engineer-in-charge is satisfied that upto date investments (excluding security deposit & performance guarantee, which are not considered as investments) made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of upto date payments received vis-à-vis upto date investments made on the work to enable engineer-in-charge to check to his satisfaction that the payments made by engineer-in-charge are property utilized only on the work and nowhere else."

#### 10. COMMITTED PROGRAM OF COMPLETION FROM CONTRACTOR SIDE

- 1. On acceptance of work, contractor has to submit a committed program of completion keeping in the view of the prescribed mile stones, stipulated period of completion duly signed by him. The program submitted by contractor shall be monitorable in a format as may be acceptable to Engineer-in-charge.
- 2. On receipt of the prescribed Performance Guarantee and aforesaid committed program of completion necessary letter to commence the work shall be issued to contractor by Registrar, MNIT and the site of work would be handed over to contractor thereafter.

#### 11. GENERAL CONDITIONS OF CONTRACT

#### **Definitions:**

- 1. The contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the Director, MNIT Jaipur and the Contractor together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-charge/ Architects and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- 2. In the contract, the following expressions shall, unless the context otherwise requires have the meanings, hereby respectively assigned to them:-
- i) The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
- ii) The site shall mean the land/ or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- iii) The contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- iv) The Director, MNIT Jaipur means their nominees also.
- v) Director means the Director of MNIT Jaipur.
- vi) The Engineer-in-charge means the Engineer of MNIT Jaipur who shall supervise and be in-charge of the work.
- vii) Architect means the Architect appointed by MNIT
- viii) Centre means the MNIT Jaipur.
- ix) Department means MNIT Jaipur.
- x) Government means Govt of India or Govt. of Rajasthan as applicable.
- xi) Accepting authority shall mean the authority who accepts the tender.
- xii) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Institute, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Institute of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Institute faulty design of works.

- xiii) Market Rate shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule `F' to cover, all overheads and profits.
- xiv) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates mentioned in Schedule `F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
- xv) District Specifications means the specifications followed by the State Govt in the area where the work is to be executed.
- xvi) Tendered value means the value of the entire work as stipulated in the letter of award.

#### Scope & Performance

- 3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
- 4. Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
- 5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications. Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

#### Works to be carried out

The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and in the full and entire execution and completion of the works. The descriptions given in the Schedule of quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognised principles.

#### Sufficiency of Tender:

7. The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and the rates and price quoted in the Schedule of Quantities, which rates and prices shall except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

#### **Discrepancies and Adjustment of Errors**

- 8. The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General conditions
- 8.1 In case of discrepancy between the schedule of Quantities, the specification and/or the drawing, the following order of preference shall be observed:
  - (i) Description of schedule of quantities i.e. nomenclature of item.
  - (ii) Particular specification, additional conditions and special conditions, if any.
  - (iii) CPWD specifications.
  - (iv) Indian standard specifications of B.I.S.
  - (v) Drawings.
  - (vi) Decision of Engineer-in-charge.

If there are varying or conflicting provisions made in any one document forming part of the contract, the accepting authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

8.2 Any error in description, quantity or rate in Schedule of quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

#### Signing of Contract

- 9. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall, within 15 days from the stipulated date of start of the work sign the contract consisting of the notice inviting tender, all the documents if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - (i) No payment for the work done will be made unless contract is signed by the contractor.

#### 12. CLAUSES OF CONTRACT

#### APPLICABILITY SUBJECT TO PROFORMA OF SCHEDULES:

#### Clause - I

#### **Performance Guarantee**

- The contractor shall submit an irrevocable Performance Guarantee of 5% (Five Percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-charge upto a maximum period as specified in Schedule 'F' on written request of the contractor stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge. This Guarantee shall be in the form of Deposit at call receipt of an 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 Govt. Securities or Fixed Deposit Receipts or Guarantee Bonds of any scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any bank is furnished by the contractor to the Institute as part of the performance guarantee and the bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Institute to make good the deficit.
- ii) The performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time of completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- iii) The Institute shall not make a claim under the Performance guarantee except for amounts to which the Institute is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Institute may claim the full amount of the Performance Guarantee.
- (b) Failure by the contractor to pay to the Institute any amount due, either as agreed by the contractor or determined under any of the clauses/conditions of the agreement, within 30 days of the service of notice to this effect by engineer-in-Charge.
- iv) In the event of the contract being determined or rescinded under provision of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Institute.

#### Clause - 1 A

#### Recovery of Security Deposit:-

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Institute at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit @ 5% of the tendered value of the work. Such deductions will be made and held by Institute by way of Security Deposit unless he/ they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Govt. Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Institute as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Institute to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by Institute on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of Institute Securities (if deposited for more than 12 months) endorsed in favour of the Institute, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest money if deposited in cash at the time of tenders will be treated a part of the Security Deposit.

- Note 1: Government papers tendered as security will be taken at 5% (five percent) below its market price or at its face value, whichever is less. The market price of Government paper would be ascertained by the Engineer –in-charge at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.
- Note -2: Government Securities will include all forms of Securities mentioned in rule No. 274 of the G.F Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.
- Note 3: Note 1 & 2 above shall be applicable for both clause 1 & 1 A

#### Clause -2

#### **Compensation for Delay:**

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the Institute on account of such breach, pay as agreed compensation the amount calculated at the rate of 1.5% (One decimal five percent) per month as the Director of Institute (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed month (as applicable) that the progress remains below that specified in Clause 5 or that the work remains in-complete. This will also apply to items or group of items for which a separate period of completion has been specified.

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Institute. In case, the contractor does not achieve a particular milestone mentioned in Schedule 'F', or the re-scheduled milestone (s) in terms of clause 5.4, the amount shown against that milestone shall be withheld to be adjusted against the compensation levied at the final grant of

Extension of Time. Withholding of this amount on failure to achieve a milestone shall be automatic, without any notice to the contractor. However, if the contractor catches up with the progress of the work, on the subsequent milestone (s), the with held amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone (s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

#### Clause - 3

When Contract can be determined: - Subject to other provisions contained in this clause the Director may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/ or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i). If the contractor having been given by the Director a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii). If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii). If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Director (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Director.
- iv). If the Contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any, stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Director.
- v). If the contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Director.
- vi). If the contractor commits any acts mentioned in Clause 21 hereof:
- When the contractor has made himself liable for action under any of the cases aforesaid, the Director on behalf of the MNIT Jaipur shall have powers:
- a). To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Director shall be conclusive evidence). Upon such determination or rescission the Earnest Money Deposit, security deposit already recovered and the performance guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Institute.
- b). After giving notice to the contractor to measure up the work of the contractor and to take such whole or the balance work as shall be un-executed out of his hands to give it to another contractor to complete the work. The contractor whose contract is determined or rescinded as above shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Director the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer –in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

## Clause – 3A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8<sup>th</sup> of the stipulated time of completion of the work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the Contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

#### Clause – 4

#### Contractor liable to pay compensation even if action not taken under clause 3:-

In any case in which any of the powers conferred upon the Director by Clause – 3 thereof, shall have become exercisable and the same are not exercised, the non exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Director putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Director which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Director) all or any tools plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final, and binding on the contractor otherwise the Director by notice in writing may order the contractor or his clerk of the works, foreman or other authorised agent to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Director may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

#### Clause - 5

#### Time and Extension for delay:-

The time allowed for execution of the Works as specified in Schedule `F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in letter of award after the date on which the Director issues written orders to commence the work or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid Institute shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

As soon as possible after the contract is concluded the contractor shall submit a Time and Progress Chart for each milestone and get it approved by the Engineer-in –charge. The chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the

work and may be amended as necessary by agreement between the Director and the contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in schedule 'F'.

- 5.2 If the work(s) be delayed by :-
- i) Force majeure or
- ii) Abnormally bad weather, or
- iii) Serious loss or damage by fire or
- iv) Civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or.
- v) delay on the part of other contractors or tradesmen engaged by Director in executing work not forming part of the contractor.
- vi) Any other cause which, in the absolute discretion of the authority mentioned in schedule `F' is beyond the contractor's control. Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Director but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Director to proceed with the works.
- 5.3 Request for rescheduling of milestones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 5.4 In any such case the Director of the Institute may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the contractor by the Director of the Institute in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Director and this shall be binding on the contractor.

#### Clause – 6

#### Measurements of Work Done :-

Engineer- in- Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.

All measurements of all items having financial value shall be entered in Measurement Book and/ or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer- in- Charge or his authorised representative and by the contractor or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in- Charge or his authorized representative and the contractor or his authorised representative in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by the concerned parties.

If for any reason the contractor or his authorised representative is not available and the work of recording measurements is suspended by the Engineer- in- Charge or his representative, the Engineer- in- Charge and the department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorised representative does not remain present at the time of such measurements after the contractor or his authorised representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurements, then such measurements recorded in his absence by the Engineer- in- Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant 'Standard method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than seven days notice to the Engineer- in- Charge or his authorised representative incharge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer- in- Charge or his authorised representative incharge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer- in- Charge's consent being obtained in writing the same shall be uncovered at the contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer- in- Charge or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/ or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

#### Clause-6A

#### Computerised measurement book

Engineer In Charge Shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.

All measurement of all items having financial value shall be entered by the contractor and complied in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.

All such measurement and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and /or his authorized representative. The contractor will, thereafter, incorporate

such changes as may be done during these checks/ test checks in his draft book, duly bound and with its pages machine numbered. The Engineer-in-Charge and /or his authorized representative would thereafter check the MB and record the necessary certificates for their check / test checks

The final fair computerized measurement book given by the contractor, duly bound with its pages machine numbered should be 100% correct and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound the Divisional Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department.

The contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications or local custom in the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than seven days notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and or test checking the measurement or any work in order that the same may be checked and or test checked and correct dimensions thereof be taken before measurement and shall not cover up and place beyond reach of measurement any work w3ithout consent in writing of the Engineer-in-Charge or his representative in-charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or place beyond the reach of checking and/or test checking being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment of allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge in charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and / or test checking the measurements of any item of work in the measurement book and / or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor form liabilities from any over measurement or defects noticed till completion of the defects liability period.

#### Clause - 7

#### Payment on intermediate certificate to be regarded as advances:-

The interim or running account bills shall be submitted by the contractor for the work executed on the basis of recorded measurements on the format of the Institute in triplicate on or before the date of every month fixed for the same by the Engineer-in-charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment / adjustment of advances for material collected, if any, since the last such payment is less than Rs. Five lakhs in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-incharge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate (s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/ are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided, without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

## Clause – 8

#### **Completion certificate and completion plans:**

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-charge and within thirty days of the receipt of such notice the Engineer-in-charge shall inspect the work and if there is no defect in the work shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or(b) for which payment will be made at reduced rates shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/ their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-charge. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning of dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding surplus materials and rubbish etc and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

#### Clause 8A

#### Contractor to keep site clean :-

The splashes and droppings from white washing, colour washing, painting etc on walls, floor windows etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc where the work is done

without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-charge shall give ten days notice in writing to the contractor.

#### Clause 8 B

#### <u>Completion plans to be submitted by the Contractor</u>:-

The contractor shall submit five sets of completion plans within thirty days of the completion of the work along with soft copy.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to ceiling of Rs. 1,00,000/- (Rupees One Lakhs Only) as may be fixed by Director of the Institute concerned and in this respect the decision of the Director of the Institute shall be final and binding on the contractor.

#### Clause 9

#### Payment of final bill :-

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-charge whichever is earlier. The contractor shall make no further claims after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by engineer-in-charge, will as far as possible be made within six months from the date of receipt of the bill by the Engineer-in-charge or his authorised representative.

#### Clause 10

#### Materials supplied by the government

Materials which Government will supply are shown in Schedule 'B' which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The contractor shall be bound to procure them form the Engineer-in-Charge.

As soon as the work awarded the contractor shall finalize the programme for the completion or work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings or schedule of quantities of the work. The Contractor shall give in writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the material so supplied at the rates specified in the aforesaid schedule shall be se off or deducted as and when material are consumed in items or work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time or submission of bills, The contractor shall certify that balance of material supplied is available at site in original good condition.

The contractor shall submit alongwith every running bill (on account or interim bill) material wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section wise in the case of steel) and resulting variations and reasons therefore. Engineer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 42 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as necessary. Notwithstanding anything to the contrary contained in any other clause of the contract and (or the CPWA Code) all stores/materials so supplied to the contractor or procured with the assistance of the Government shall remain the absolute the property of Government and the contractor shall be the trustee of the sotres/ materials and the shall not be removed/ disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer-in-Charge or his authorized agent. Any such stores/ materials remaining unused shall be returned to the Engineer-in-Charge in as good a condition in which they were originally supplied at a place directed by him, at a place of issue or any other place specified by him as he shall require, but in case it is decided no to take back the stores/materials the contractor shall have no claim for compensation on any account of such stores/ material so supplied to him as aforesaid and not used by him or any wastage in or damage to in such stores/materials.

On Being required to return the stores/materials, the contractor shall hand over the stored/ materials on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him. excluding the storage charge, if any. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to account for contravention of the terms of the licenses of permits and / or for criminal breach of trust, be liable to Government for all advantages or profits resulting of which in the usual course would have resulted to him by reason of such breach provided that the contractor shall in no case be entitled to any compensation or damages on provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Government within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of work exceeds 12 months, but if a part of the materials only has been supplied with in the aforesaid period, then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work the contractor shall be entitled to such extension of time as may be determined by the Engineer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The Contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at the time of completion or determine of the contract shall be returned to the Engineer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transportin, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place or issue.

#### Clause 10A

#### Materials to be provided by the contractor: -

The contractor shall at his own cost provide all materials required for the works. The contractor shall, at his own expense and without delay, supply to Engineer-in-charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-charge furnish proof, to the satisfaction of the Engineer-in-charge that the materials so comply. The Engineer-in-charge shall within five days of supply of samples or within five days of the receipt of test result intimate to the contractor in writing whether samples are approved by him or not. If samples are not approved the contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specification, approval of the Engineer-in-charge shall be issued after the test results are received.

The contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-charge. The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall at his risk and cost make all arrangements and shall provide all facilities as the Engineer-in-charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorised representative and Architect shall at all times have access to the work and to all such workshops and places where work is being prepared or from where materials manufactured articles, or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer-in-charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-charge shall also have full powers to require other proper materials to be substitute thereof and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the contractor.

#### Clause 10 B

#### Secured Advance on Non-perishable Materials :-

The contractor, on signing an indenture in the form to be specified by the Engineer-in-charge shall be entitled to be paid during the progress of the execution of the work upto 75% of the assessed value of any materials which are in the opinion of the Engineer-in-charge nonperishable, non-fragile and noncombustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/ or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work the amount of such advance shall be recovered/deducted from the next payment made under any of the clause or clauses of this contract.

Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-incharge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-incharge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

Mobilization advance (ii) Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing one month of the order to commerce the work. In such a case, the contractor shall execute a Bank Guarantee Bond from a Scheduled Bank as specified by the Engineer-in-Charge for the full amount of mobilization advance before such advance is released. Such advance shall be into one or more installments to be determined by the Engineer-in-Charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-Charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent installments shall be released by the Engineer-in-Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-in-Charge.

Provided always that provision of Clause 10 B (ii) shall be applicable only when provided in 'Schedule F'.

Plant & Machinery (iii) An advance for plant, machinery & shuttering material required for the work and brought to site by the contractor may be given if requested by the contractor in writing within one month of bringing such plant and machinery to site. Such advance shall be given on such plant and machinery, which in the opinion of the Engineer-in-Charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5% percent of the tender value. In the case of new plant and equipment to be purchased for the work, the advance shall be restricted to 90% of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-Charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50% of the depreciated value of plant and equipment as may be decided by the Engineer-in-Charge. The contractor shall, if so required by the Engineer-in-charge, submit the statement of value of such old plant and equipment duly approved by a Registered Valuer recognized by the Central Board of Direct Taxes under the Income-Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on any plant and equipment of a value less than Rs. 50,000/-. Seventy five per cent of such amount of advance shall be paid after the plant & equipment is brought to site and balance twenty five percent on successfully commissioning

Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following: Leasing company which gives certificate of agreeing to lease equipment to the contractor.

Engineer in Charge, and

The contractor.

This advance shall further be subject to the condition that such plant and equipment (a) are considered by the Engineer-in-Charge to be necessary for the works; (b) and are in working order and are maintained in working order; (c) hypothecated to the Government as specified by the Engineer-in-Charge before the payment of advance is released. The contractor shall not be permitted to remove from the site such hypothecated plant and equipment without the prior written permission of the Engineer-in-Charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. For this purpose, steel scaffolding and from work shall be treated as plant and equipment.

The contractor shall insure the plant and Machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insurer will be borne by the contractor.

Interest & Recovery (iv) The mobilization advance and plant and machinery advance in (ii) & (iii) above bear simple interest at the rate of 10 per cent per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the contractors bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10 in such a way that the entire advance is recovered by the time eighty per cent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment.

(v) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the Engineer-in-Charge.

(vi) The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to cover the balance amount and likely period of complete recovery together with interest.

#### CLAUSE 10 C

#### Payment on account of Increase in Prices/Wages due to Statutory Order (s)

If after submission of the tender, the price of any material incorporated in the works (not being a material supplied from the engineer-in-Charge's stores in accordance with Clause 10 thereof) and/ or wages of labour increases as a direct result of the coming into force of any fresh law, or Statutory rule or order (but not due to any changes in excise, sales tax, VAT etc) and such increase in the price and/or wages prevailing at the time of the last stipulated date for receipt of the tenders including extensions if any for the work, and the contractor thereupon

necessarily and properly pays in respect of that material (incorporated in the works) such increased price and/ or in respect of labour engaged on the execution of the work such increased wages, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of the work in question.

If after submission of the tender, the price of any material incorporated in the works (not being a material supplied from the engineer-in-Charge's stores in accordance with Clause 10 thereof) and/or wages of labour is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes in sales tax) and such decrease in the prices and/or wages prevailing at the time of receipt of the tender for the work. The Institute shall in respect of materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores in accordance with Clause – 10 hereof) and/or labour engaged on the execution of the work after date coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. The on tractor shall, for the purpose of this condition, keep such books of account and other documents s are necessary to show the amount of any increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of the Institute and further shall, at the request of the engineer-in-Charge may require any documents so kept and such other information as the Engineer-in-Charge may require.

The contractor shall, within a reasonable time of his becoming aware of any alteration in the prices of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereof which he may be in position to supply.

#### CLAUSE 10 CA (NOT APPLICABLE)

#### Payments due to variation in prices of materials after receipt of tender

If after submission of the tender, the price of materials mentioned in Schedule-F increase / decreases beyond the price (s) prevailing at the time of the last stipulated date for receipt of tenders (including extensions, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that any such variations shall be effected for stipulated period of Contract including the justified period extended under the provisions of Clause 5 of the Contract without any action under Clause 2.

However for work done during the justified period extended as above, it will be limited to indices prevailing at the time of stipulated date of completion or as prevailing for the period under consideration whichever is less.

The increase/decrease in prices shall be determined by the All India Wholesale Prices Indices of Materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for material as issued under the authority of MNIT, JAIPUR as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration. In case, price index of a particular material is not issued by Ministry of Commerce and Industry, then the price index of nearest similar material shall be followed.

The amount of the contract shall accordingly be varied for all such materials and will be worked as per the formula given below for individual material:-

Adjustment for component of individual material

$$V = P \times Q \times \frac{CI - CI0}{CI0}$$

Where,

V = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

P = Base Price of material as issued by MNIT, JAIPUR valid at the time of the last stipulated date of receipt of tender including extensions, if any.

Q = Quantity of material as used in the works since previous bill.

CI0 = All India Wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce as valid on the last stipulated date of receipt of tenders including extensions, if any.

CI = All India Wholesale Price Index for the material for period under consideration as published by Economic advisor to Government of India, Ministry of Industry and Commerce. Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of materials covered in this Clause.

#### CLAUSE 10 CC (NOT APPLICABLE)

#### Payment due to Increase / Decrease in Prices/Wages after Receipt of Tender for Works

If the prices of materials (not being materials supplied or services rendered at fixed prices by the department in accordance with clause 10 & 34 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less then the time as specified in Schedule F. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions:-

- i) The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any.
- ii) The cost of work on which escalation will be payable shall be reckoned as below:
- a) Gross value of work done upto this quarter: (A)
- b) Gross Value of work done upto the last quarter: (B)
- c) Gross value of work done since previous quarter (A-B) (C)
- d) Full assessed value of Secured Advance (Excluding materials covered under Clause 10CA) fresh paid in this quarter: (D)
- e) Full assessed value of Secured Advance (Excluding materials covered under Clause 10CA) recovered in this quarter. (E)
- f) Full assessed value of Secured advance for which escalation is payable in this quarter (D-E): (F)
- g) Advance payment made during this quarter (G)
- h) Advance payment recovered during this quarter (H)
- i) Advance payment for which escalation is payable in this quarter (G-H) (I)
- j) Extra Items paid as per Clause 12 based on prevailing market rates during this quarter: (J)

Then, M = C + F + I - J

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$$N = 0.85 M$$

k) Less cost of material supplied by the department as per Clause 10 and (K) recovered during the quarter:

1) Less cost of services rendered at fixed charges as per Clause 34 and (L) recovered during the quarter

#### Cost of work for which escalation is applicable:

$$W = N - (K+L)$$

iii) Components for materials (except cement, reinforcement bars, structural steel or other materials covered under clause 10CA) labour, P.O.L., etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'E'. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the contractors.

iv) The compensation for escalation for cement, steel, materials and P.O.L. shall be worked as per the formula given below:-

(a) Adjustment for component of 'Cement'

$$Vc = W \times \frac{Xc}{100} \times \frac{CI - CI0}{CI0}$$

Vc = Variation in cement cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-Para (ii) of Clause 10 CC.

Xc = Component of cement expressed as percent of total value of work.

CI = All India Wholesale Price Index for cement for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing of the period under consideration, whichever is less, shall be considered.)

CIO = All India Wholesale Price Index for cement as published by Economic advisor to Government of India, Ministry of Industry and Commerce as valid on the last stipulated date of receipt of tenders including extensions, if any.

(b) Adjustment for component of 'Steel'

$$Vs = W x$$
  $Xs x$   $SI - SIO$   
 $100$   $SIO$ 

Vs = Variation in steel cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-Para (ii) of Clause 10 CC.

Xs = Component of steel expressed as percent of total value of work.

SI = All India Wholesale Price Index for steel (bars & rods) for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce. However the Price Index shall be minimum of the following:

i) Index for the month when the last consignment of steel reinforcement for the work is procured or

ii) Index for the month in which half of the stipulated contract period is over.

iii) Index for the period under consideration.

For the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the principle as for the period within stipulated period of completion, will apply.

SI0 = All India Wholesale Price Index for steel (bar & rods) published by Economic advisor to Government of India, Ministry of Industry and Commerce as valid on the last stipulated date of receipt of tender including extensions, if any.

 $(c) \ Adjustment \ for \ civil \ component \ (except \ cement \ and \ steel) \ of \ all \ construction \ `Materials'$ 

$$Vm = W x$$
  $\underline{Xm}$   $x \underline{MI - MIO}$   $100$   $MIO$ 

Vm = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-Para (ii) of Clause 10 CC.

Xm = Component of 'materials' expressed as percent of the total value of work.

MI = All India Wholesale Price Index for all commodities for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration, whichever is less, shall be considered.)

MIO = All India Wholesale Price Index for all commodities valid on the last stipulated date of receipt of tenders including extensions, if any, as published by the Economic advisor to Government of India, Ministry of Industry and Commerce

(d) Adjustment for component of **'POL'** 

$$V = W \times Z \times FI - FIO$$
100 FIO

Vf = Variation in cost of Fuel, Oil & Lubricant i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-Para (ii) of Clause 10 CC.

Z = Component of Fuel, Oil & Lubricant expressed as percent of the total value of work.

FI = All India Wholesale Price Index for Fuel, Oil & Lubricant for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce, New Delhi. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration, whichever is less, shall be considered.)

FIO = All India Wholesale Price Index for Fuel, Oil & Lubricant valid on the last stipulated date of receipt of tender including extensions, if any.

v) The following principles shall be followed while working out the indices mentioned in Para (iv) above.

a) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills paid during the three calendar months of the said quarter. The first such payment shall be made at the end of three months after the month (excluding) in which the tender was accepted and thereafter at three months' interval. At the time of completion of the work, the last period for payment might becomes less then 3 months depending on the actual date of completion.

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b) The index (MI/FI etc.) relevant to any quarter/period for which such compensation is paid shall be the arithmetical average of the indices relevant to three calendar months. If the period up to date of completion after the quarter covered by the last such installment of payment, is less than three months, the index MI and FI shall be the average of the indices for the months falling within that period.

vii) The compensation for escalation for labour shall be worked out as per formula given

below:-

$$VL = W \times \underline{Y} \times \underline{LI - LI0}$$

$$100 \quad LI0$$

VL = Variation in labour cost i.e. amount of increase or decrease in the amount in rupees to be paid or recovered.

W = Value of Work done, worked out as indicated in sub-para (ii) above.

Y = Component of labour expressed as percentage of the total value of work.

LI = Minimum wages in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the minimum wages prevailing on the last date of quarter previous to the quarter pertaining to stipulated date of completion or the minimum wages

prevailing on the last of the quarter previous to the one under consideration, whichever is less, shall be considered.)

LIO = Minimum daily wage in rupees of an unskilled adult male mazdoor fixed under any law, statutory rule or order as on the last stipulated date of receipt of tender including extensions, if any.

viii) The following principles will be followed while working out the compensation as per subpara (vi) above.

- a) The minimum wage of an unskilled male mazdoor mentioned in sub para (vi) above shall be the higher of the wage notified by Government of India, Ministry of Labour and that notified by the local administration both relevant to the place of work and the period of reckoning.
- b) The escalation for labour also shall be paid at the same quarterly intervals when escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials and/or P.O.L. is paid under this clause. If such revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rated only for work done in subsequent quarters.
- c) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled adult male mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.
- ix) In the event the price of materials and/or wages of labour required for execution of the work decrease/s, there shall be a downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formula herein before stated under this Clause 10CC shall mutatis mutandis apply, provided that:
- a) No such adjustment for the decrease in the price of materials and/or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is equal to or less than the time as specified in Schedule 'F'.
- b) The Engineer-in-Charge shall otherwise be entitled to lay down the procedure by which the provision of this sub-clause shall be implemented from time and the decision of the Engineer-in-Charge in this behalf shall be final and binding on the contractor.
- x) Provided always that the provision of the preceding clause 10C and 10CA shall not be applicable for contracts where provisions of this clause are applicable but in cases where provisions of this clause are not applicable, the provisions of Clause 10C and 10CA will become applicable.

#### CLAUSE 10 D

#### **Dismantled Material Institute Property**

The contractor shall treat all materials obtained during dismantling of a structure, of the site for a work, etc. as Institute's property and such materials shall be disposed off to the best advantage of Institute according to the instructions in writing issued by the Engineer-in-Charge.

#### Clause – 11

Work to be executed in accordance with specifications, drawings, orders etc.:- The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with CPWD Specifications 1996 Vol.I to VI with upto date correction slips and CPWD specifications 1994 for internal electrification and 1995 for external electrification with upto date correction slips. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department specified in schedule `F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

#### Clause 12

Deviations/Variations Extent and Pricing: The Director shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Director and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

- 12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows:-
- i). In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.
- ii). 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-charge.
- 12.2 In the case of extra item(s) the contractor may within fifteen days of receipt of order of occurrence of the item(s) claim rates, supported by proper analysis, for the work and the engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

- a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so, decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- 12.3 The contractor shall send to the Engineer-in-Charge once every three months an upto date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Director may authorize consideration of such claims on merits.
- 12.4 Any operation incidental to or necessarily has to be in contemplation of tenderer while filling tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

#### Clause 13

Foreclosure of Contract due to Abandonment or Reduction in Scope of Work: - If at any time after acceptance of the tender, Institute shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Director shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and in addition, a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilised on the work to the full extent in view of the foreclosure:-

- i). Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- ii). Institute shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, Institute shall be
- iii). shall offer or give or agree to give to any person in Institute service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Institute; or
- iv). Shall enter into a contract with Institute in connection with which commission has been paid or agreed to paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/ Director; or
- v). Shall obtain a contract with Institute as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- vi). being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- vii). Being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- viii). shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- ix). assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Accepting Authority:

The Accepting Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Institute, by a notice in writing to cancel the contract as whole or only such items of work in default from the Contract.

The Director shall on such cancellation by the Accepting Authority have powers to :

- a). take possession of the site and any materials, constructional plant, implements, stores etc., thereon; and/or
- b). carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part, the Director shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the works or in case the works or part of the works is not to be completed, the loss or damage suffered by Institute. In determining the amount, credit shall be given to the contractor for the value of the work executed by him upto to time of cancellation, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

Any excess expenditure incurred or to be incurred by Institute in completing the works or part of the works or the excess loss or damages suffered or may be suffered by Institute as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Institute in law be recovered from any moneys due to the contractor on any account, and if such moneys are not sufficient the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor shall fail to pay the required sum within the aforesaid period of 30 days the Director shall have the right to sell any or all of the contractor's unused materials, constructional plant, implements, temporary buildings, etc and apply the proceeds of sale thereof towards the satisfaction of any sums due from the contractor under the contract and if thereafter there be any balance outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.

Any sums in excess of the amounts due to the Institute and unsold materials, constructional plant, etc. shall be returned to the contractor, provided always that if cost or anticipated cost of completion by Institute of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

#### Clause -14

#### Carrying out part work at risk & cost of contractor

If contractor:

- (i) At any time makes default during currency of works or does not execute any part of the work with due diligence and continues to do se even after a notice in writing of 7 days in the respect from the Engineer-in-charge or
- (ii) Commits default in complying with any of the terms and conditions of the contract does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-charge or
- (iii) Fails to complete the works or items of work with individual dates of completions, on or before the dates so determined and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-charge.

The Engineer-in-charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to government, by a notice in writing to take the part work/ part incomplete work of any item(s) out of his hands and shall have powers to:

- (a) Take possessions of the site and materials, constructional plant, implements, stores, etc. Thereon, and / or
- (b) Carry out the part work / part incomplete work of any items by any means at the risk and cost of the contractor.

The Engineer-in-charge shall determine the amount, if any, is recoverable from the contractor for the completion of the part work / part incomplete work of any item(s) taken out his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by the institute because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to contractor with the value of work done in all respect in the same manner and at the same rates as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's material taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificates of the Engineer-in-charge as to the value of work done shall be final and conclusive against the contractor provided also that if expenses incurred by the department are less than the amount payable to the contractor as his agreement rates, the difference shall not be payable to contractor.

Any excess expenditure incurred or to be incurred by the institute in completing the part work/part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by the institute as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to institute in law or as per agreement be recovered from any money due to the contractor on any account , and if such money is insufficient , the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-charge shall have the right to sell any or all of the contractors' unused materials, construction plants, implements, temporary buildings at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of the above course being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or produced any materials or entered into any engagement or made any advance on any account or with a view to the execution of the work or the performance of the contract.

#### Clause - 15

#### Suspension of work

- i). The contractor shall, on receipt of the order in writing of the Director, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Director may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
- a). On account of any default on the part of the contractor or
- b). For proper execution of the works or part thereof for reasons other than the default of the contractor or
- c). For safety of the works or part thereof

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Director.

- ii). If the suspension is ordered for reasons (b) and (c) in sub-para (I) above :
- a). The contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25% for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part and:
- b). If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Director may consider reasonable in respect of salaries and/ or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor. Provided the contractor submits his claim supported by details to the Director within fifteen days of the expiry of the period of 30 days.
- iii). If the works or part thereof is suspended on the orders of the Director for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (I) above, the contractor may after receipt of such order serve a written notice on the Director requiring permission within fifteen days from receipt by the Director of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by the Institute or where it affects whole of the works, as an abandonment of the works by the Institute, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Director. In the event of the contractor treating the suspension as an abandonment of the contract by the Institute, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Director may consider reasonable, in respect of salaries and/ or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Director within 30 days of the expiry of the period of 3 months.

#### Clause 16

Action in case work not done as per specifications: All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Director, his authorised subordinates in charge of the work / architect and all the superior officers of the Institute and the Chief Technical examiner's office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself. If it shall appear to the Engineer-in-charge or his authorised subordinates incharge of the work or to the Architect or the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance

with the contract the contractor shall, on demand in writing which shall be made within six months of the completion of the work from the Engineer-in-charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Director may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/ or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Director to be conveyed in writing in respect of the same will be final and binding on the contractor.

#### Clause - 17

Contractor Liable for damages, defects during maintenance period: If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever of if any defect, shrinkage or other faults appear in the work within twelve months (Six months in the case of any work other than road work costing Rs. 1,00,000/- and below) after a certificate final or otherwise its completion shall have been given by the Director as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

#### Clause 18

Contractor to Supply Tools & Plants etc.: The contractor shall provide at his own cost all materials, plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage there of to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

#### Clause 18A

Recovery of compensation paid to workman: In every case in which by virtue of the provisions sub-section (1) of section 12, of the Workmen's Compensation Act, 1923, Institute is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Institute will recover from the contractor for the amount of the compensation so paid; and, without prejudice to the rights of the Institute under sub-section (2) of Section 12, of the said Act, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise. Institute shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Institute full security for all costs for which Institute might become liable in consequence of contesting such claim

#### Clause 18 B

Ensuring Payment and Amenities to Workers if Contractor fails:— In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Institute is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act the Rules framed by Institute from time to time for the protection of health and sanitary arrangements for workers employed by Institute Contractors, Institute will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the Institute under sub-section (2) of Section 20 and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise Institute shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Institute full security for all costs for which Institute might become liable in contesting such claim.

#### Clause 19

<u>Labour Laws to be complied by the Contractor</u>: - The contractor shall obtain a valid licence under the Contract Labour (R & A) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the Provisions of Child Labour (prohibition and Regulation) Act, 1986

The contractor shall also comply with the provisions of the building and other construction workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Welfare Cess Act, 1996. The Contractor shall also abide the provisions of Contract Labour (Regulations and Abolition) Act 1970 and the Contract Labour Regulation & Abolition Central Rules 1971.

Any failure to fulfil this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work. The Contractor shall also abide by the provisions of child labour (Prohibition and Regulations) Act, 1986.

#### Clause 20

#### Minimum Wages Act to be complied with:

The Contractor shall comply with all the provision of the Minimum Wages Act, 1948, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought from time to time.

#### Clause 21

Work not to be sublet. Action in case of insolvency: The Contract shall not be assigned or sublet without the written approval of the Director. And if the contractor shall assign or sublet his contract, or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the contractor, or any of his servants or agent to any public officer or persons in the employ of Institute in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Director on behalf of the Board of Governors of the Institute shall have power to adopt any of the courses specified in Clause 3 hereof as he may deem best suited to the interest of the Institute and in the event of any of these courses being adopted the consequences specified in the said Clause 3 shall ensure

#### CLAUSE 22:

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of the Institute without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

#### **CLAUSE 23**

Changes in firm's constitution to be intimated: Where the Contractor is a partnership firm, the previous approval in writing, of the Director shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid, shall likewise, be obtained before the Contractors enters into any partnership agreement where under the partnership firm would have the right to carry out the work hereby undertaken by the Contractor. If previous approval, aforesaid, is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken and the same consequences shall ensue as provided in the said Clause 21.

#### **CLAUSE 24**

<u>Directions for execution of works:</u> All works to be executed under the contract shall be executed under the direction and subject to the approval of the Director of the Institute who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

#### **CLAUSE 25**

Settlement of Disputes & Arbitration: Except where otherwise provided in the contract all questions and all disputes relating to the meaning of the specification, design, drawings and instructions here - in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Director of Institute or if there be no Director of the Institute the administrative head of the said Institute. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking Arbitration shall give a list of disputes with amounts claimed in respect of each such dispute alongwith the notice for appointment of arbitrator and giving reference to the rejection by the Director of the Institute of the appeal.

It is also a term of this contract that no person other than a person appointed by such Director of the Institute or the administrative head as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-Charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Institute shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and conciliation Act. 1996, (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

#### **CLAUSE 26**

Contractor to Indemnify Institute against patent Rights: The Contractor shall fully indemnify and keep indemnified the Board of Governors of the Institute against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part of thereof included in the Contract. In the event of any claims made under or action brought against. Institute in respect of any such matter as aforesaid the Contractor shall be immediately notified thereof and the Contractor shall be at liberty at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom. Provided that the Contractor shall not be liable to indemnify the Board of Governors of the Institute if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer in Charge in this behalf.

#### **CLAUSE 27**

<u>Lump sum Provision in Tender:</u> When the estimate on which a tender is made includes lump sum in respect of parts of the work, the Contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates, as are payable under this contract for such items, or if the part of the work in question is not in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump sum amount entered in the estimate, and the

certificate in writing of the Engineer-in-Charge shall be final and conclusive against the Contractor with regard to any sum payable to him under the provisions of the clause.

#### **CLAUSE 28**

Action where no specifications are Specified: In case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standard Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturer's specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

#### CLAUSE 29

With-holding and lien in respect of Sums due from Contractor: (i) Whenever any claim, for payment of a sum of money arises out of or under the contract or against the contractor, the Institute shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Institute shall be entitled to withhold the security deposit, if any furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the Institute shall be entitled to withhold and have lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Director pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Institute will be kept withheld or retained as such by the Institute till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause where the contractor is a partnership firm or a limited company, the Institute shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/ limited company as the case may be, whether in his individual capacity or otherwise.

(ii) Institute shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Institute to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Institute to the contractor, without any interest thereon whatsoever.

Provided that the Institute shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Institute on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge.

#### **CLAUSE 30**

Lien in respect of claims in other Contracts: Any sum of money due and payable to the Contractor (including security deposit returnable to him) under this contract may be withheld or retained by way of lien by the Institute or any other contracting person or persons through Engineer-in-Charge against any claim of the Institute or such other person or persons in respect of payment of a sum of money arising out of or under any other Contract made by the Contractor with the Institute or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Institute will be kept withheld or retained as such by the Institute or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

#### **CLAUSE 31**

<u>Water supply:</u> The Contractor(s) shall make his/ their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the condition that the water used by the contractor(s) shall be fit for construction purposes.

#### **CLAUSE 32**

Alternate water arrangement: The contractor shall be allowed to construct temporary wells in Institute land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

#### **CLAUSE 33**

Return of Surplus materials: Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of Institute either by issue from Institute stocks or purchase made under orders or permits or licenses issued by Institute the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the Institute and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition the contractor shall in addition to throwing himself open to action for contravention of the terms of the license or permit and / or for criminal breach of trust, be liable to Institute for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

#### **CLAUSE 34**

Plant & Machinery: The contractor shall arrange at his own expense all tools, plant, machinery and equipment.

#### CLAUSE 35: deleted

#### CLAUSE 36:

Employment of technical staff and employee Contractors Superintendence, Supervision, Technical Staff & Employees. The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for

proper fulfilling of the obligations under the contract The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-In-Charge, the names, qualifications, experience, age, addresses and other particulars along with certificates of the principal technical representative to be in charge of the work and other technical representative who will be supervising the work. Minimum requirement of such technical representative and their qualifications and experience shall not be lower than specified in schedule F. The Engineer-In-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative shall be appointed by the contractor soon after receipt of the approval from Engineer-In-Charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under the clause will also be applicable to other technical representative. The principal technical works for supervision at all times when any construction activity is in progress and also present him/ themselves as required, to the Engineer-In-Charge and or his designated representative to take instruction. Instructions given to the principal the same force as if these have been given to the contractor. The principal technical representative and other technical representative shall be actually available at site fully during all stages of execution of work, during recording/ checking/ test checking of measurements of works and whenever so required by the Engineer-In-Charge and shall also note down instructions conveyed by the Engineer-In-Charge or his designated representatives in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements look after any other work. Substitutes, duly approved by Engineer-In-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative by more than two days. If the Engineer-In-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery (nonrefundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/ test checked in measurement books shall be final and binding on the contractor. Further if the contractor rails to appoint suitable technical principal technical representative and or other technical representatives and if such without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-In-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative is appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative along with every on account bill/ final bill and shall produce evidence if at any time so required by the Engineer-In-Charge. The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work. The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work. The Engineer-In-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-In-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-In-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

#### **CLAUSE 37:** Levy/Taxes payable by Contractor.

- i) Sales Tax service tax, VAT, Octroi, purchase tax or turnover tax or any other tax in respect of this contract shall be payable by the Contractor and Institute shall not entertain any claim whatsoever in this respect.
- ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Institute to the State Government, Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Institute and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

#### **CLAUSE 38:**

#### Conditions for reimbursement for levy/taxes if levied after receipt of tenders.

- (i) All tendered rates shall be inclusive of all taxes and levies (except service tax) payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes / levies/ cess the contractor shall be reimbursed the amounts so paid, provided such payments, if any, is not, in the opinion of the Registrar attributable to the delay in execution of work within the control of the contractor.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this conditions as may be necessary and shall allow inspection of the same by a duly authorized representative of the Government and/or the Engineer in charge may require from time to time.
- (iii) The contractor shall, give a written period of 30 days of the imposition of any such further tax or levy, or cess give a written notice thereof to the Engineer in charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

#### CLAUSE 39: Termination of Contract on death of contractor

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Director on behalf of the Board of Governors of the Institute shall have the option of terminating the contract without compensation to the contractor.

#### <u>CLAUSE 40</u>: <u>If relative working in MNIT then the contractor not allowed to tender</u>

The contractor shall not be permitted to bid for works in the MNIT (responsible for award and execution of contracts), in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the MNIT or in the Ministry of Human Recourses & Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of MNIT.

NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents' children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

#### **CLAUSE 41:**

#### No Gazetted Engineer to work as contractor within one year of retirement

No engineer of gazetted rank or other gazetted officer employed in engineering of administrative duties in an engineering department of the Government of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 42: Deleted

**CLAUSE 43** 

Compensation during warlike situations: The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by Engineer-in-Charge. The contractor shall be paid for the damages/ destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations(a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Engineer-in-Charge. (b) for any material etc. not on the site of the work or for any tools, plant, machinery scaffolding, temporary building and other things not intended for the work.

In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Director.

#### CLAUSE 44:

#### Apprentices act provisions to be compiled with

The contractor shall comply with the provisions of the Apprentices Act,1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be breach of the contractor and the Registrar may in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said act.

#### CLAUSE 45

Release of Security deposit after labour clearance.: Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge. The Engineer in charge on receipt of the said communication shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, or recorded till after 3 months after completion of the work and/ or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released if otherwise due.

#### Safety Code

- 1. Suitable scaffolds should be provided for workmen for all works that can not safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well as suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than ¼ to 1 (1/4 horizontal and 1 vertical)
- 2. Scaffolding of staging more than 3.6m (12 ft) above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm (3ft) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends there of with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent if from swaying from the building or structure.
- 3. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 (12ft) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
- 4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90cm (3ft).
- 5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m (30ft) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11 ½") for ladder upto and including 3m (10ft) in length. For longer ladders this width should be increased at least ¼" for each additional 30cm (1foot) of length. Uniform step spacing of not more than 30cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defiance of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
- 6. Excavation and Trenching All trenches 1.2m (4ft) or more in depth, shall at all times be supplied with the least one ladder for each 30m (100ft) in length or fraction thereof Ladder shall extend from bottom of the trench to at least 90 cm (3ft) above the surface of the ground. The side of the trenches which are 1.5m (5ft) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5m (5ft) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- 7. Demolition Before any demolition work is commenced and also during the progress of the work,
- a. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- b. No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- c. All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- 8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipments shall invariably be provided:
- i). Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- ii). Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- iii). Those engaged in welding works shall be provided with welder's protective eye shields.
- iv). Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- v). When workers are employed in sewers and manholes, which are in active use, the contractor shall ensure that the manholes are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to:
- a). Entry for workers into the line shall not be allowed except under supervision of the Engineer-in-charge or any other higher officer.
- b). At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
- c). Before entry presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
- d). Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
- e). Safety belt with rope should be provided to the workers. While working inside the manholes such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- f). The area should be barricaded or cordoned of by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- g). No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- h). The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- i). Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
   j). Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
- k). Air-blowers should be used for flow of fresh air through the manholes. Whenever called for portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away for the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- 1). The workers engaged for cleaning the manholes/ sewers should be properly trained before allowing to work in the manhole.

- m). The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- n). Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o). If a man received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- p). The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case well be final.
- vi). The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-
- a). No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
- b). Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scraped.
- c). Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- 9. An additional clause (viiii) (i) of Safety Code (iv) the Contractor shall not employ women and man below the age of 18 on the work of painting with product containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:
- i). While lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
- ii). Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
- iii). Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- iv). Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
   v). Overall shall be worn by working painters during the whole of working period.
- vi). Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- vii). Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of Institute.
   viii). Institute may require, when necessary medical examination of workers.
- ix). Instruction with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
- 11. Use of hoisting machines and tackle including their attachment, anchorage and supports shall conform to the following standards or conditions:-
- a). These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
  - b). Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- ii). Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
- iii). In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- iv). The contractors shall notify the safe working load of their machines to the Engineer-in-charge whenever he brings any machinery to site of work and get it verified by the Engineer-in-charge.
- 12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energised, insulating mats, wearing apparel, such as gloves, sleeves and boots and may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- 13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work
- 14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place of work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- 15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-charge or their representatives.
- 16. Notwithstanding the above clauses from (1) to (15) there is nothing in these to exempt the contractor from the operations of any other Act or Rules in force in the Republic of India.

#### 13. PROFORMA OF SCHEDULES

#### SCHEDULE 'A '

Schedule of quantities

- i. Civil enclosed.
- ii. Electrical enclosed.

#### SCHEDULE 'B'

Schedule of materials to be issued to the contractor

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

No material shall be issued to the Contractor by the Institute.

#### SCHEDULE 'C'

Tools and plants to be hired to the contractor

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

No tools & plants shall be hired to the Contractor by the Institute.

#### SCHEDULE 'D'

Extra schedule for specific requirements/ document for the work, if any.

- Nil -

#### SCHEDULE 'E'

Schedule of component of other materials, labour, POL, etc for price escalation.

10CC : Not Applicable. 10C & 10CA : Not Applicable.

#### SCHEDULE 'F'

**Reference to General Conditions of contract.** General Conditions of contract for Central PWD Works 2010 as amended upto DGW/CON/277 dated 03/12/2013.

B 44 COO

Name of work: Renovation of old school for conversion in labs at MNIT Campus, Jaipur.

1. Estimated cost of work: CIVIL :Rs.22,16,500.00

ELECTRICAL :Rs.5,56,500.00 TOTAL :Rs.27,73,000.00

i. Earnest Money : Rs 55,460.00

Signature of Tenderer(s)

iii. Performance Security: composite tendered amount. iv. Security deposit 5% 5% (five percent) of accepted

5% of tendered value

v.	General Rules & Directions Officer inviting tender	Director, MNIT Jaipur
Definitions	Officer inviting tender	
2(v)	Engineer-in-Charge	The Engineer of MNIT Jaipur who shall
2(viii)	Accepting Authority	supervise and be Incharge of the work. Director, MNIT Jaipur
2(x)	Percentage on cost of materials And labour to cover all overheads and profits	15%
2(xi)	Standard Schedule of Rates	(i). C.P.W.D. Delhi Schedule of Rates 2016 with upto date correction slips issued upto the date of receipt of tenders.
		(ii) Rajasthan PWD BSR 2014 for internal electrification and external electrification with upto date correction slips issued upto the date of receipt of tender.
2(xii)	Department	MNIT Jaipur
Clause 1	(i)Time allowed for submission of performance guarantee from date of issue of letter of acceptance.	15 Days
	(ii)Maximum allowable extension with late fees @0.1%per day of performance guarantee amount beyond the period as provided in (i) above.	7 Days
Clause 2	Authority for fixing compensation under clause 2.	Director, MNIT, Jaipur.
Clause 2A Clause 5	Wheather clause 2A applicable	No.
(i)	Number of days from date of issue of letter of acceptance for reckoning date of start.	22 Days
(ii)	Mile Stone chart.	As per attached below.
(iii)	Time allowed for execution of work.	06 Months
(iv)	.Authority to give extension of time for completion of work	Director, MNIT Jaipur

Name of work: Renovation of old school for conversion in labs at MNIT Campus, Jaipur.

### **Mile Stones of the Contract**

S.No.	-	Period for Completion from date of start in days/ months	Withheld amount for non-achievement of mile stone
1	Gross work done amounting 11/48 of tendered amount.	1-4 of stipulated period for completion	1% of accepted tendered amount
2	Gross work done amounting 3S8 of tendered amount.	1-2 of stipulated period for completion	1% of accepted tendered amount
3	Gross work done amounting 3a4 of tendered amount.	3-4 of stipulated period for completion	1% of accepted tendered amount
4	Gross work done amounting equal or more of tendered amount and completion of work, whichever is earlier.	Full stipulated period for completion	1% of accepted tendered amount

The withheld amount to non-achievement of mile stone may be released if the subsequent mile stone is achieved in the specified time.

Mile stone shall be applicable both for civil as well as electrical component of the work as attached. The main contractor will ensure that electrical components of the work are executed in time without giving any chance for slippages of mile stones on account of delay in execution of associated electrical work by him. However in case mile stones are not achieved by the contractor for the work, the amount shown against civil and electrical component of work shall be withheld by the Executive Engineer in charge of the main agreement.

Clause 6A	Clause 6/6A applicable.	6A
Clause 7	Gross work to be done together with net payment/ adjustment of advances for material of collected, if any, since the last such payment for being eligible to interim payment	Rs. 05.00 Lakhs
Clause 10A	List of testing equipments to be provided by the contractor at site lab.	i)Cube testing moulds. ii)Sieve set as per IS:460/1962. iii)Slump cone. iv)Plumb bob, Vernier caliper, screw gauge & spirit level. v)Measuring tape. (3m – 30m) vi)Digital weighing balance. vii)Rebound hammer. viii)As required by Engineer-in-charge.

Clause 10B Applicable or not				Appli	cable.			
Claus	se 10C	Not Applicable			N.A.			
		Component of Lab percentage of value o	•	as	N.A.			
Clause	e 10CA	Not Applicable			N.A.			
Clause	e 10CC	Not Applicable.			N.A.			
Claus	ee 11	Specifications to execution of work	be followed f	or	works slips f ii).CP electri electri slips. iii).CI & II	part –II or lifts a WD Specification offication PWD Sp	decifications for Electrical II 2003, upto date correction and Escalators. ecifications 2005 for internal and 1995 for external with upto date correction decifications 2009 volume I to date correction slips for	
Clause 12 Type of wo		Type of work.	ζ.		Project & Original work.			
12. iter		Deviation limit beyond which clause 12.2 & clause 12.3 shall apply for all items including foundation & super structure.		Not Applicable for Deviation.  For All limits of deviations in all items the quoted rate shall only prevail, and nothing on account of deviation shall be entertained.  Applicable for extra & substitute item.  Extra and substitute items shall be treated according to conditions of clause				
Claus	se 16	Competent authori reduced rates.	ty for decidii	ng	Direct	tor, MN	IT, Jaipur.	
Clause	e36 (i)	Requirement of tech and recovery rates.	nical representativ	ve				
S.N o.	Minimum Discipl Designation Mir		Expe	Ainimum Nu Experienc bei		Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36 (i) per month		
1	Diploma Engineer	/ Graduate (Civil)	Technical Representative	Nil Grad 5 yea Diplo	uate irs for	for	Rs. 10,000/- Rs. Ten Thousan d only	

<sup>&</sup>quot;Assistant Engineer retired from Government Services those are holding Diploma will be treated at par with Graduate Engineer."

#### 14. ADDITIONAL CONDITIONS

- 1. The contractors are advised to get acquainted with the proposed work and its site and also study the Architectural Drawings, specifications and special conditions carefully before tendering. No claim of any sort shall be entertained on account of any site conditions and ignorance of specifications and special conditions.
- 2. The work shall be carried out as per CPWD specifications for works-2009 Vol. I & II with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the specifications and special conditions, where specifications are silent, the decision of Engineer-in-Charge shall be final and binding on contractors.
- 3. 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, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available there from is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale. 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 work on the basis of any erroneous and/ or incomplete information and no claim whatsoever shall be entertained on this account.
- 4. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account i.e. royalty, cartage, sales tax and stacking at required places etc.
- 5. The rates for different items of work shall apply for all heights and depths, leads and lifts unless otherwise specified in the agreement or specifications applicable to the agreement.
- 6. Any damage done by the contractor to any existing work during the course of execution of the work shall be made good by him at his own cost.
- 7. Articles manufactured by the reputed firms and approved by Engineer-in-Charge shall only be used.
  - Only articles classified, as 'first quality' by the manufacturer shall be used unless otherwise specified. In case articles bearing ISI certification are not available in the market, quality of samples brought by the contractor shall be judged by standards laid down in the relevant CPWD specifications. For the items not covered by CPWD specifications relevant BIS standards shall apply. The sample of materials to be brought to site for use in work shall be got approved from the Engineer-in-Charge before actual execution of work.
- 8. Various factory made materials shall be procured from reputed and approved manufacturers or their authorized dealers. List of such approved manufacturers is available at Annexure V. For the items / materials not appearing in the list the decision of Engineer in charge shall be final and binding. Any ISI marked material can be used in the work unless specifically provided for use of particular brand and make of item.
- 9. Wherever work is specified to be done or material procured through specialized agencies, their names shall be got approved well in advance from Engineer in charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work, contractor should negotiate with concerned specialist agencies and send their names for approval to Engineer in charge. Any material procured without prior approval of Engineer in charge in writing is liable to be rejected. Engineer in charge reserves right to get the materials tested in laboratories of his choice before final acceptance. Non standard materials shall not be accepted.

- 10. Doors and frames shall be procured from specialist firms and name of such agencies shall be got approved from the Engineer in charge well in advance.
- 11. The contractor shall take instruction from the Engineer in charge for stacking of materials at any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services or compound walls are to be constructed.
- 12. Royalty at the prevalent rates shall be payable by the contractor on all the boulders, metals, shingle, sand and bajri etc. collected by him for the execution of the work, direct to the Revenue authority or authorized agent of the state Government concerned or Central Government.
- 13. The contractor shall establish a fully equipped site laboratory and shall provide electrically operated cube crushing and testing machine appliance at site, such as weighing, scale, graduated cylinder, standard sieves, thermometer, slump cones etc. all relevant tests for BMC as per prescribed IS codes in order to enable the Engineer in charge to conduct field tests to ensure that the quality is consistent with the prescribed specifications and nothing extra shall be paid on this account.
- 14. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the results or such tests and consequences thereon shall be binding on the contractor.
- 15. The contractor shall get the water tested with regard to its suitability of use in the works and get written approval from the Engineer in charge before he proceeds with the use of same of execution of works. If the tube well water is not suitable, the contractor shall arrange Municipal water or from any other sources at his own cost and nothing extra shall be paid to the contractor on this account. The water shall be got tested at frequency specified in latest CPWD specifications/BIS code.
- 16. The material shall conform to the quality and make as per attached list in Annexure V. However for the items not appearing in the list preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of sample brought by the Contractor shall be judged by the standard laid down in the relevant ISI specification/CPWD specification. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but stand banned by CPWD will not be used. Notwithstanding the case of materials of "Approved Make" as given in Annexure V, provisions of Clause 10A of the General Conditions of Contract for central PWD works shall be applicable on the materials of "Approved Make" also.
- 17. It must be ensure that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should confirm to CPWD specification and relevant BIS codes. In such case written approval of the Technical sanctioning Authority may be obtained before use of such material in the work
- 18. The final approval of the brand to be used shall be as per the direction of Engineer-in-Charge. The brand used shall be one of the brands in case specified in the list of approval materials as per Annexure-V.
- 19. In case of non availability of material of the brands specified in the list of approved materials an equivalent brand may be used after getting written approval of T/S Authority giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

- 20. Contractor shall have to execute a Guarantee Bond in respect of Water Proofing works as per Performa attached in this N.I.T. at Annexure IV. He shall also have to execute guarantee bonds for water supply and sanitary installations work on the proforma available at Annexure III.
- 21. Samples of materials required for testing shall be provided free of cost by the contractor. Testing charges, if any, shall be borne by the department in case the test results are satisfactory except where-ever specifically mentioned otherwise in the NIT. All other expenditure to be incurred for taking samples, conveyance, packing etc. shall be borne by the contractor.
- 22. The construction joints shall the provided in predetermined locations only as decided by Engineer in charge. The cost of shuttering for these construction joints shall be included in item of Concrete work / RCC work and nothing extra shall be payable on this account to the contractor.
- 23. No chase cutting/dismantling of plaster/RCC/CC shall be allowed, so contractor has to execute the electrical work accordingly.
- 24. The contractor shall invariably prepare the samples of finishing items i.e. flooring of different types, external & internal finishing i/c colour scheme of paint, tiles in dado, flooring in platforms & staircase, water supply & sanitary fittings and any other item as per direction of Engineer-in-charge. The contractor shall proceed with further finishing items only after getting the samples of these items approved in writing from Engineer-in-charge.
- 25. The contractor shall maintain the time bound progress for the execution of work and get it approved by the Engineer in charge. The contractor shall submit progress report by 7th of every month on the format to be given by Engineer-in-charge, failing which penalty of Rs. 5000/shall be imposed on the contractor for each default. For delay of each day in submission of progress report beyond 7th day of every month, an additional penalty of Rs. 1000/- per day subjected to maximum of Rs. 20,000/- in month, shall be imposed. Penalty amount shall be recovered from the next payment due to the contractor.
- 26. The contractor shall submit a detailed program of work within 5 days of the date of issue of letter of intent. Detailed program should include all the mile stone, cash flow, material procurement, manpower deployment. Program must show clearly the critical path to complete the project in time. The Engineer-in-Charge can modify the programme and the contractor shall have to work accordingly. During review of work progress, Engineer in Charge can ask to modify the programme. Contractor shall resubmit the modified programme in 2 days.
- 27. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
- 28. The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving of the materials and clearance before use in work.
- 29. The quantities of each item shall not be exceeded beyond the agreement quantities without prior permission of Engineer-in-Charge.
- 30. Statutory deductions on account of VAT, income tax and surcharge as applicable shall be made from the gross amount of the bill.
- 31. The contractor shall make his own arrangements for obtaining electric connection, if required and make necessary payments directly to the department concerned.
- 32. All types of mortars to be used in the work shall be mixed in the mechanical mixer and hand mixing shall not be permitted.
- 33. The contractor shall make his own arrangement for getting the permission to ply the trucks from the traffic police.

- 34. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer in charge. Nothing extra shall be paid on this account.
- 35. For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature indicated in the publications abbreviated nomenclature of item of DSR 1981 (bilingual) shall be accepted. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and other relevant specifications.
- 36. No payment shall be made to the contractor for any damage caused by rain, snow fall, floods or any other natural causes whatsoever during the execution of work. The damage caused to work shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.
- 37. In the case of items of which abbreviated nomenclature is not available in the above cited publication and also in case of extra and substituted items of works for which abbreviated nomenclature is not provided in the agreement, the full nomenclature of items shall be reproduced in the measurements books and bill forms for running account bill.
- 38. The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bill.
- 39. Other agencies may also simultaneously be executing the work of electrification, Horticulture or external services and other building works for the same building along with this work. The contractor shall afford necessary facilities for the same and no claim in the matter shall be entertained. The contractor shall especially co-ordinate with the other agency carrying out his work.
- 40. Some restrictions may be imposed by the security staff etc. on the working and or movement of labour and materials, etc, the contractor shall be bound to follow all such restrictions / instructions and nothing shall be payable on this account.
- 41. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work by storing materials on the road.
- 42. The contractor shall be fully responsible for the safe custody of the material issued or brought by him to site for doing the work.
- 43. Unless otherwise specified all materials (e.g. stone and other valuable material) obtained in the work of dismantling, excavation etc. shall be considered Government's property and shall be neatly stacked at site & in the manner as decide by the Engineer-in- charge.
- 44. The building work will be carried out in the manner complying in all respects with the requirements of relevant by elaws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer in charge and nothing extra will be paid on this account.
- 45. The work of water supply, internal sanitary installation and drainage work etc. shall be carried out as per local Municipal Corporation or such local body Bye-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work.
- 46. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charges which he may be liable.
- 47. The contractor shall give a performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.

48. Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been in-built in the items and nothing extra shall be payable (or) extra cement considered in consumption on this account.

#### 49. PROGRAM CHART

- 49.1 The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, material, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval to the Engineer-in-Charge within ten days of award of the contract, failing which Rs.500/- per day shall be recovered (non refundable) from the contractor's next running bill till the date of actual submission.
- 49.2 The program chart should include the following:
  - (i) Descriptive note explaining sequence of the various activities.
  - (ii) Network (PERT or CPM or Bar chart).
  - (iii) Program for procurement of materials/equipments/labour by the contractor.
- 49.3 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program to ensure completion of the work. The modified schedule of program shall be approved by the Technical Sanctioning Authority. In case of delay in submission of revised program chart, a sum of Rs 1000/- per day shall be recovered (non refundable) from the contractor's next running bill till the date of actual submission.
- 49.4 The submission for approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of the duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

#### **50. WATER SUPPLY & SANITARY**

- The joints of GI pipes and fittings, C.P. Brass & Other fittings with GI pipe etc. shall be executed by using Teflon tapes.
- 50.2 The work shall get executed through approved agency.
- Water Supply & Sanitary shall be concealed only after all testing is done, test check is done by department & third party check is done, wherever required.

#### 15. ADDITIONAL SPECIFICATION

#### 1.0 GENERAL

- 1. The work in general shall be executed as per the description of the item, specification attached, CPWD specifications 2009 Vol-I & II.
- 2. In case of any variation between different applicable specifications, the following order of precedence will be followed:
  - a. Description of schedule of quantities i.e. nomenclature of item.
  - b. Particular specification, additional conditions and special conditions, if any.
  - c. CPWD specifications.
  - d. Indian standard specifications of B.I.S.
  - e. Drawings.
  - f. Decision of Engineer-in-charge.
- 3. The work shall be executed and measured as per metric units given in the schedule of quantities, drawings etc. (F.P.S. units wherever indicated are for guidance only).
- 4. The following modification to the above specifications and some additional specifications shall however apply.
  - 4.1 All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved quarries at **GUNAWTA** or any other source as approved by the Engineer in charge.
  - 4.2 Sand to be used for cement concrete work, mortar for masonry and plaster work **Banas River**. Sand obtained from other sources shall be got approved from the Engineer in charge. The same shall consist of hard siliceous material. It shall be clean sand.
  - 4.3 The term Yamuna sand, if specified in the item shall be read as Banas River sand. The grading of sand shall be within the limits of grading zone IV or V specified in Section 3 'Mortars'.
- 5. Wherever any reference to any Indian Standard Specification occurs in the documents related to this contract, the same shall be inclusive of all amendments issued there to or revisions thereof, if any, upto the date of receipt of tenders.
- 6. Unless otherwise specified in the schedule of quantities the rates for all items of the work shall be considered as inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source, such as rains, floods subsoil water table being high due to any other cause whatsoever.

#### 2.0 RCC WORK

- 7. In respect of projected balconies, projected slabs at roof level and projected verandah, the payment for the RCC work shall be made under the item of RCC slabs. The payment for centering and shuttering of such items shall similarly be paid under the item of centering and shuttering of RCC slab. Nothing extra shall be paid for the side shuttering at the edges of these projected balconies and projected verandahs. All the exposed edges shall however be finished as per specifications and nothing extra shall be paid for this.
- 8. The contractor shall provide approved type of supports for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings. Spacer block/cover blocks of required shape and size, M.S. chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement. Spacer blocks/cover

blocks shall be cast well in advance with approved proprietary prepacked free flowing mortars (conbextra as manufactured by M/s Fosroc Chemicals India Ltd or approved equivalent) of high early strength. Blocks of polymer shall not be used as spacer blocks unless specially approved by the Engineer-in-charge. Rate of item of steel reinforcement is inclusive of cost of such cover blocks.

#### 3.0 FLOORING

- 9. The rate of items of flooring is inclusive of providing sunken flooring in bathrooms, kitchen etc. and nothing extra on this account is admissible. The samples of flooring, dado & skirting as per approved pattern shall be prepared & got approved from the Engineer-in-charge before execution of work.
- 10. Nothing extra shall be payable for using combination of marble, granite, kota, sand stone slabs & ceramic /vitrified tiles etc. in the required pattern at various locations.
- 11. Nothing extra shall be paid for the additional thickness of bed mortar that will be required to achieve uniform finished surface on account of difference in specified thickness of marble, granite, kota, sand stone slabs & ceramic /vitrified tiles etc,.
- 12. Flooring in toilets, verandah, kitchen, courtyard etc. shall be laid to the required slope/gradient as per the directions of the Engineer-in-Charge.
- 13. The pattern, spacing and locations of joints shall be as per drawings and direction of the Engineer-in-Charge.

#### **4.0 WOOD WORK**

- 14. The samples of species of timber to be used shall be got approved and deposited by the contractor with the EE before commencement of the work. The contractor shall produce cash vouchers and certificates from kiln seasoning or/and chemical treatment plants about the timber section to be used on the work having been kiln seasoned or/and chemically treated by them.
- 15. Factory made shutter as specified shall be obtained from factories as per list given in Annexure-V or form any other factory to be approved by the Engineer in charge & confirming to IS 2202 1977 (part-I). The contractor shall inform well in advance to the Engineer in charge the names and address of the factory from where the contractor intends to get the shutters manufactured. The contractor will place order for manufacture of shutters only after written approval of the Engineer in charge in this regard is given. The contractor is bound to abide by the decision of the Engineer in charge and recommend a name of another factory from the approved list in case the factory already proposed by the contractor is not found competent to manufacture quality shutters. Shutters will however be accepted only if this meet the specified tests. The contractor will also arrange stage wise inspection of the shutters at factory of the Engineer in charge or his authorised representative. Contractor will have no claim if the shutters brought at site are rejected by Engineer in charge in part or in full lot due to bad workmanship / quality even after inspection of factory. Such shutters will not be measured and paid and the contractor shall remove the same from the site of work within 7 days after the written instruction in this regard are issued by Engineer in charge or his authorised representative.

#### **5.0 STEEL WORK**

- 16. The rate of T/L angle iron frame shall include the following.
  - 16.1 M.S. sill/tie of 10mm dia bar welded to T-iron frames to keep the frames vertical in correct position. The sill / tie shall be embedded in floor concrete. No tie is necessary for window frames.
  - 16.2 Each T iron frame for doors shall have 4 Nos M.S. lugs 15x3mm, 10 cms long welded to each vertical member of the frame.
  - 16.3 M.S. flat 6 x 25 mm, 100 mm long having threaded holes (No. of flats shall correspond to the no. of butt hinges to be fixed to door / window shutters) shall be welded at appropriate places at the back of the T-iron frames for fixing the required butt hinges to the frame with machine screws.
- 17. All welded structural steel work shall be tested for quality of weld as laid down in IS 822-1970 before actual erection if required.

#### **6.0WATER SUPPLY, SANITARY INSTALLATION**

- 18. The SCI/CI pipes and GI pipes wherever necessary shall be fixed to RCC columns, beams etc. with rawl plugs and nothing extra shall be paid for this
- 19. The contractor shall be responsible of the protection of the sanitary and water supply fittings and other fittings and fixtures against pilferage and breakage during the period of installation and thereafter until the building is handed over.
- 20. Cast iron pipes and fittings without ear shall be used. However, pipes and fittings with ears may be accepted without any extra payment. In such cases, clamps are not required and no extra payment shall be made for fixing the pipes in a different manner.

# **7.0 VARIATION IN CONSUMPTION OF MATERIALS**

- 21. The variation in consumption of material shall be governed as per CPWD specification and clauses of the contract to the extent applicable. The following specific clauses shall govern the variation in consumption of pig lead.
- 22. The pig lead to be used in jointing 100mm, 75mm and 50 mm SCI/CI pipe joints in sanitary installations shall not be less than 0.98 kg, 0.88 kg and 0.77 kg per joint respectively.
- 23. The theoretical quantity of cement to be utilized in item of concrete involving use of single aggregate and mixed by volume batching shall be computed on the basis of the coefficient for cement to be used in different item of the work provided in DSR reducing each of the coefficient by 5%. However, where the concrete is mixed by weight batching no such reduction shall be made from theoretical co-efficient given in DSR 2007 for concrete with crushed stone aggregate.

#### **8.0 EMBEDDING OF PIPES, CONDUITS ETC.**

24. The brick work for the portions of external wall of W.C. through which pipes are taken, will be done after the pipes are fixed as for as practicable.

25. All crossings, embedment etc. in walls and floors for water supply, drainage and sanitary pipes, fittings etc. shall be provided as per previously prepared detailed drawings for individual walls and floors so as to avoid cuttings of brick work and floors. All such areas shall be made good during finishing and nothing extra shall be paid for this.

#### 9.0 PAINT BROUGHT BY THE CONTRACTOR

- 26. The contractors shall bring sufficient quantity of paint of brand & shade Approved by Engineer-in-Charge prior to the commencement of work & keep it in his stores at site of work under double lock & key.
- 27. The paint shall be issued to the contractor from time to time according to requirements for the work in the same manner as followed for issue of cement.
- 28. Empty containers shall not be removed without the written permission of the Engineer-in-charge.

# **10.0 FIXING OF SCI/CI PIPE**

29. The SCI/CI pipes and G.I. pipes, wherever necessary, shall be fixed to RCC columns, beams etc. with rawl plugs, or appropriate fasteners as approved by Engineer-in-Charge, and nothing shall be payable on this account.

#### 16. PARTICULAR SPECIFICATION

#### 1.0 ALUMINUM WORK

Aluminum work shall be got executed from specialized agency. The specialized agency for the aluminum work shall be got approved form the Engineer-in-Charge, well before actual commencement of the item of work. Necessary performance certificates in respect of agencies proposed to be engaged shall be submitted within 30 days from the date of issue of acceptance letter to substantiate technical capability and experience of the agency for prior approval of the Chief Engineer.

#### **Specification for Aluminum Door, Window, Ventilator**

#### 1. Extent and Intent:

The work shall be carried out through an approved specialist contractor who shall furnish all materials, labour, accessories equipment tool & plant, incidental. Required for providing and installing anodized aluminum door, windows, claddings, louvers and other items as called for on the drawings. Te drawings and specifications cover the major requirement only. The supplying of additional fastenings, accessory features and mentioned specifically herein but which are necessary to make a complete installation shall be a part of the contract.

#### 2. General:

Aluminum doors, windows etc. shall be of sizes, section detail as shown on the drawings. The details shown on the drawings indicate generally the sizes of the components parts and general standards. These may be varied slightly to suit the standard adopted by the manufacture. Before proceeding with any manufacturing, the contractor shall prepare and submit complete manufacturing and installation drawings for approval of Engineer-in-Charge and no work shall be performed until the approval of these drawings is obtained.

#### 3 Shop Drawings :

The contractor shall submit the shop drawings of doors, windows louvers cladding and other aluminum work, based on architectural drawings to Engineer-in-Charge for this approval. The drawings shall show full size sections of door, window etc. thickness of metal (i.e. wall thickness) details of construction, sub frame / rough ground profile anchoring details, hardware as well as connection of windows doors, and other metal work to adjacent work. Samples of all joints and methods of fastening and joining shall be submitted to the Engineer-in-Charge for approval well in advance of commencing the work.

#### 4 Samples:

Samples of doors, windows, louvers etc shall be fabricated assembled and submitted to the Engineer-in-Charge for his approval. They shall be sizes, types etc. as decided by Engineer-in-Charge. All samples shall be provided the cost of the contractor.

#### 5 Sections:

Aluminum doors and windows shall be fabricated from extruded section of profiles as detailed on drawings. The sections shall be extruded by the manufacturers approved by the Engineer-in-Charge. The aluminum extruded section shall conform to IS designation 63400 WP (HV9WP old designation) with chemical composition and technical properties as per IS: 733 and 1285. The permissible dimensional tolerance of the extruded sections shall be such as not to impair the proper and smooth function / operation and appearance of doors and windows.

#### 6 Fabrications:

Doors, window etc. shall be fabricated to sizes as shown at factory and shall be of section, sizes combinations and details as shown in the Architectural drawings, all doors, windows etc. shall have mechanical joints. The joints shall be designed to withstand a wind load of 150 kgs. Per sqm the design shall also ensure that the maximum deflection of any member shall accurately machined and fitted to form hairline joints prior to assembly. The join and accessories such as cleats brackets, etc. shall be of such materials as not to cause any bi-metallic action, the design of the joints and accessories shall be such that the accessories are fully concealed. The fabrication of doors, window etc. shall be done in suitable sections to facilitate easy transportation, handing and installation. Adequate provision shall be made in the door and windows members for anchoring to support and fixing of hardware and other fixture as approved by the Engineer-in-Charge.

# .7 Anodising:

All aluminum sections shall be anodized as per IS: 7088 and to required colour as specified in the item as per IS: 1868 grading, after cutting the members to requisite sizes. Andising shall be to the specified grade with minimum average thickness of 15 microns when measured as per IS: 6012. The anodic coating shall be properly sealed by steams or by boiling in deionized water or cold sealing process as per IS: 1868 / IS: 6057. Polythene tape protection shall be applied on the anodized sections before they are brought to site. All care shall be taken to ensure surface protection shall be removed on transportation, storage at site and installation. The tape protection shall be removed on installation. The sample will be tested in the approved laboratory and cost of samples, cost or testing shall be borne by the contractor.

#### 8 Powder Coating:

The powder used for powder coating shall be polyster powder made by Berger or Jenson & Nicholsion or equivalent. The thickness of powder coating shall not be less than 50 micron at any point measured with micrometer.

#### 9 Protection of Finish:

All aluminum members shall be wrapped with approved self-adhesive non-staining PVC tapes.

- Handling and stacking:
- 10.1 Fabricated materials shall be carted in an approved manner to protect the material against any damage during transportation. The loading and unloading shall be carried out with utmost care. On receipt of materials at site, they shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged pieces / parts. Material found to be acceptable on inspections shall be repacked in crates and stored safely.
- .10.2 In the case of composite windows, and doors the different units are to be assembled first. The assembled composite units should be checked for line, level and plumb before final fixing is done. Unit may be serial numbered and identified as how to be assembled in their final location of situation so warrants.
- 510.3 Where aluminum comes in to contact with masonry brick work / concrete / plaster or dissimilar metals. It shall be coated with approved insulation lacquer paint or plastic tape to ensure that electro chemical corrosion is avoided. Insulation materials shall trimmed off to clear flush line on completion.

#### 10.4 Silicon Sealant:

The peripheral gaps between plastered faces / RCC and aluminum sections shall be sealed both from inside and out side to make the windows watertight. Gaps upto 10mm between the peripheral aluminum member and masonry /RCC/ Stone shall be sealed by inserting. Backer Rod manufactured by HT TROPLAST or Supreme Industries and by application of weather silicon / sealant of DOW corning / GE silicon make.

- 10.5 The contractor shall be responsible for assembling composite, bedding set straight plumb, level and for their satisfactory operation after fixing is complete.
- 11 Installation:
- 11.1 Just prior to installation the doors, windows etc. shall be uncrated and stacked on edge on level bearers and supported evenly. The frame shall be fixed in to position true to line and level using adequate number of expansion machine bolts, anchor fasteners of approved size and manufacture and in an approved manner. The holes in concrete / masonry members for housing anchor bolts shall be drilled with an electrical drill.
- 11.2 The doors windows assembled as shown on drawings shall be placed in correct final position in this opening and marks made on concrete members at jambs, sills and heads

against the holes provided in frames for anchoring. The frame shall then be removed the n the opening and laid aside. Neat holes with parattle sides of appropriate size shall then be drilled in the concrete members with an electric drill at the marking to house the expansion bolts. The expansion bolts shall then be inserted in the holes, struck with a light hammer till the nut is forced in to the anchor shall. The frame shall then be placed in final position. In the opening and anchored to the support through cadmium plated machine screws of required sized threaded to expansion bolts. The frame shall be set in the opening by using wooden wedges at supports and be plumbed in position. The wedges shall invariably be place at meeting points of glazing bars and frames.

#### 11.3 Neoprene Gaskets:

The E.P.D.M. gasket of suitable profile as manufactured by HANU INDUSTRIES, ANNAND LESCUYER make shall be provided at all required positions to make the glazing airtight. The contractor shall provide and install Neoprene Gaskets of approved size and profile at all locations as shown and as called for to render the doors windows etc. absolutely air tight and weather tight. The contractor shall submit samples of the gaskets for approval and procure after approval only.

#### 11.4 Fittings:

The contractor shall cut the floor properly with stone cutting machine to exact size and shape. The spindle of suitable length to accommodate the floor finish shall be used. The contractor shall give the guarantee duly supported by the company for proper functioning of floor springs at least for 10 years.

Hinges, stays handles, tower bolts, locks and other fittings shall be of quality and manufacturer as approved by the Engineer-in-Charge.

#### 12 Manufacture's Attendances:

The manufacture immediately proper to the commencement of glazing shall adjust and set all windows and foors and accept responsibility for the satisfactory working of the opening frames.

- 13 Details of Test:
- 13.1 The various tests on aluminum sections shall be conducted in accordance with the relevant IS codes.
- 13.2 The minimum number of each unit of doors/ windows shall be selected at random by Engineer-in-Charge as such that all the aluminum section shall be got tested.

S.No. Details No. of Tests

1. Doors, windows and Ventilators 5% of Nos. manufactured

- 13.3 The sample of major member of each unit of doors / windows shall be selected at random by Engineer-in-Charge as such that all the aluminum section shall be got tested.
- 13.4 The cost of sample carriage of the samples shall be borne by the contractor. Testing charges shall be born by department, but if a sample fails in testing, complete cost or testing charges shall be born by the contractor.

#### 14 Acceptance Criteion:

The aluminum sections shall conform to the provisions of the relevant items. For payment purpose only actual weight of sections shall be taken into account. If however, the sectional weight of any aluminum section is higher than the permissible variation then the weight payable shall be restricted to the weight of the section including permissible variation.

#### 15 Measurement:

Payment by weight shall be made for aluminum sections including beading only and all fixing angles cleats fittings and fixtures such as handles and hinges etc., shall not be included in the weight to be paid.

#### Rates:

The rates of the items shall include the cost of all materials, labors and inputs required and all the above operations.

# 17. LIST OF APPROVED PRODUCTIS FOR WORKS

S.No.	Description	Approved Manufacturer / Brand Name
1	Ceramic / Glazed Tiles	Somani, Kajaria, Orient, Johnson, Nitco
2	TMT Bars	Major producers like SAIL, Rashtriya Ispat Nigam Ltd., TISCO and reputed secondary producers having Thermox or Temp Core system of treatment and valid BIS license.
3	OPC/PPC	L&T (Ultra Tech) ACC, JK, JP, Birla, Shree, Lakshmi, Gujrat Ambuja, Vikram or equivalent
4	White Cement	Birla White, J.K. white or equivalent
5	Primers, Paints (i/c water proofing cement paint) etc	Nerolac, Asian, Bergar, Jensons & Nicholson, ICI Dulux, Snowcem
6	Lime	Santa, Dehradun, Gotan
7	Putty	Shalimar or equivalent
8	Sanitary ware and fittings	Parryware (India) Ltd., hindware, CERA, Neycer
9	Clear Glass	Modiguard, Saint Gobain, Jolly
10	GI Pipes and accessories	Tata, Jindal, BST, GST
11	Centrifugally Cast Spun Pipes & Fittings	NECO, Kesoram, or any ISI marked brand
12	DI Pipes & Fittings	NECO, Kesoram, Electrosteel, Kiswok, Jindal
13	Brass / CP Brass Fittings	L&K, Elite, Parko, Kingsston.
14	Aluminum sections (Anodising by approved anodizing firm0	Hindalco, Jindal, Indian Aluminum Co.
15	Water proofing compound	CICO, FOSROC, PIDILITE
16	Stainless steel sink	Neelkanth, Nirali, Jayna
17	Particle board i/c laminated	NOVAPAN. DECO, BHUTAN, CEO BOARD
18	Plastic W.C. seat Cover	Commander, Diplomat, Coral
19	Stoneware Pipes & Guilty traps	Perfect, Taya, ISI marked
20	C.I. double flanged valves	Kirloskar, IVC, BUM
21	Rubber gasket for DI /CI pipes	Orient or equivalent
22	Factory made paneled door shutters	Any factory with written approval
23	Flush doors	Any ISI marked door.
24	RCC Pipes	ISI Marked
25	PVC tanks	Euro-II or equivalent. or any other factory with written approval of EIC.
26	Mirrors	Golden Fish, Jolly, Saint Gobain, Modi Float
27	CP waste & Flush pipes	Oriental, Parko, Gem
28	PVC flushing cistern	Parryware, Cera, Commander
29	PVC Rigid Form	M/s Padmavati marketing, Jaipur, M/s Artworks, Udaipur, M/s ENGCO industries Jaipur.
30	HPPE/ MDPE Pipe	Reliance Industries/ Duraline and MDPE pipe as per ISO 427-1996 of Trustlene (Kimplas)/ Duraline
31	PE-Al-PE pipes	As per IS 15450-2004, Jindal, Kitec Industries
32	Accucel panel door shutters / frames	Accura polytech Pvt Ltd
33	Water proofing agency	As approved by EIC, MNIT.
34	False ceiling	Armstrong, durlum or equivalent as approved by EIC.

# Malaviya National Institute of Technology Jaipur

# **Estate Section**

# Name of Work: RENNOVATION OF OLD SCHOOL FOR CONVERSION IN LABS at MNIT CAMPUS JAIPUR

# **Price shedule**

	PART A -CIVIL			
1				
1.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge:			
1.1.1	All kinds of soil	77	sqm	
1.2	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	840	sqm	
2				
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:			
	1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	2	cum	
3				
	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.			
3.1.1	Cement mortar 1:4 (1 cement :4 coarse sand)	145	sqm	
4				

4.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.			
4.1.1	Granite of any colour and shade			
4.1.1.1	Area of slab over 0.50 sqm	46	sqm	
5				
5.1	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:			
5.1.1	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	34	sqm	
5.2	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	34	sqm	
5.3	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws:			
5.3.1	30 mm thick shutters			
5.3.1.1	With ISI marked stainless steel butt hinges of required size			
5.3.1.1.1	Second class teak wood	34	sqm	
5.4	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete:			
5.4.1	300x16 mm	28	each	

Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete:  250x10 mm  Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete:  125 mm	28	each		
Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete:	28	each		
conforming to IS:4992 with necessary screws etc. complete:				
conforming to IS:4992 with necessary screws etc. complete:				
125 mm				
	56	each		
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.				
Single rubber stopper	14	each		
Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	27	sqm		
Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :				
4.0 mm thick glass panes	13	sqm		
Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	78	sqm		
	than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.  Single rubber stopper  Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.  Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides  Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:  4.0 mm thick glass panes  Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade	than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.  Single rubber stopper  14  Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.  Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides  27  Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:  4.0 mm thick glass panes  13  Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade	than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.  Single rubber stopper  14 each  Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.  Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides  27 sqm  Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:  4.0 mm thick glass panes  13 sqm  Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade	than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.  Single rubber stopper  14 each  Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.  Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides  27 sqm  Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:  4.0 mm thick glass panes  13 sqm  Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade

7.2	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (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 Cement Mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigments etc., complete.	18	sqm	
7.3	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.			
7.3.1	Size of Tile 600x600 mm	223	sqm	
7.4	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.			
7.4.1	Size of Tile 600x600 mm	17	sqm	
8				

8.1	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer- incharge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	311	sqm	
8.2	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete:			
8.2.1	Gutter .(600 mm over all girth)	45	metre	
9				
9.1	12 mm cement plaster of mix :			
9.1.1	1:4 (1 cement: 4 fine sand)	145	sqm	
9.2	15 mm cement plaster on the rough side of single or half brick wall of mix :			
9.2.1	1:4 (1 cement: 4 fine sand)	153	sqm	
9.3	20 mm cement plaster of mix :			
9.3.1	1:4 (1 cement: 4 fine sand)	929	sqm	
9.4	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	1216	sqm	

9.5	Distempering with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.			
9.5.1	Two or more coats on new work	800	sqm	
9.6	Finishing walls with Acrylic Smooth exterior paint of required shade :			
9.6.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	333	sqm	
9.7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :			
9.7.1	Two or more coats on new work	204	sqm	
10				
10.1	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:			
10.1.1	Float glass panes of thickness 4 mm	27	sqm	
11				
11.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.			
11.1.1	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	2	cum	
11.2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.			
11.2.1	In cement mortar	33	cum	
11.3	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead:			
11.3.1	Of area 3 sq. metres and below	20	each	

11.4	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:			
11.4.1	Asbestos sheet	311	sqm	
11.5	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead:			
11.5.1	Thickness up to 40 mm	2	sqm	
11.6	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	943	sqm	
11.7	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	52	cum	
12				
12.1	Providing and laying 60mm thick faciory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved s;ze, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	80	sqm	
13				
13.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:			
13.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	3	each	

	Providing and fixing white vitreous china flat back or			
42.2	wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with			
13.2	standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:			
13.2.1	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern	1	each	
13.3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:			
13.3.1	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	2	each	
13.4	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required:			
13.4.1	Size 600x450x200 mm	6	each	
13.5	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.			
13.5.1	Semi rigid pipe			
13.5.1.1	32 mm dia	8	each	
14				
14.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting			
	chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.			
14.1.1	15 mm nominal outer dia Pipes	50	metre	

	25			1	<u> </u>
14.1.2	25 mm nominal outer dia Pipes	10	metre		
14.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. EXTERNAL WORK				
14.2.1	15 mm nominal outer dia Pipes	35	metre		
14.2.2	25 mm nominal outer dia Pipes	20	metre		
14.3	Providing and fixing uplasticised PVC connection pipe with brass unions :				
14.3.1	45 cm length				
14.3.1.1	20 mm nominal bore	5	each		
14.4	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.				
14.4.1	Rectangular tank	500	per litre		
14.5	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
14.5.1	15mm nominal bore	6	each		
14.6	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:				
14.6.1	15 mm nominal bore	1.00	No.		
15					

15.1	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm ) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised @80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre- painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.			
15.1.1	With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6)	223	Sqm	
16	Providing and fixing steel glazed doors windows and ventilator shutters of standard rolled steel section (IS 1038-1983) joints mitred and welded with steel lugs 13x3mm, 10cm. long embedded in cement concrete block 15x10x10cm. of 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws with fixing clips or with bolts and nuts as required including providing and fixing of plain glass panes 4mm thick with cooper glazing clips and special metal sash putty of approved make or metal beading with screws complete including priming coat of approval steel primer, excluding the cost of metal beading and other fitting except necessary hinges of pivots steel handles peg stay etc. as required:			

	T	Г		1	I .
16.1	Windows fixed	2	Sqm.		
16.2	Partly fixed and partly openable [ fixed area not to exceed 33%]	9	Sqm.		
17	Supplying and fixing of chain link fencing with angle iron posts 50x50x6mm placed at every 3 Mtr. apart 30cm in ground embedded in cement concrete 1:3:6 (30x30x45cm) corner and every tenth post to be strutted with (50 x 50 x 6cm) angle iron provided and fixed and fitted with posts including earth work in excavation etc. complete with chain link size.				
17.1	50mm x 50mm x 3.15mm	230	Sqm.		
18	P&F rigid <i>PVC Pipe</i> (IS:4985 mark) class II/ (4 Kg. /Cm <sup>2</sup> .) approved quality /make including joining the pipe with solvent cement rubber ring and lubricant.				
18.1	110 mm dia	65	Mtr		
19	P&F rigid <i>PVC pipe fittings</i> (IS: 4985 mark) of approved quality /make including joining the pipe with solvent cement rubber ring and lubricant:				
19.1	Plain Tee				
	110mm dia	5	Each		
19.2	Door Tee				
	110mm dia	5	Each		
19.3	Bend 87 .5				
	110mm dia	5	Each		
19.4	Door Bend (Left & Right)				
	110mm dia	5	Each		
19.5	Plain floor trap				
	110mm dia	15	Each		
	1	ı			1

20	P & F Bib Cock (IS: 8931 Mark), Superior quality of approved make:			
20.1	C.P. Brass bib cock,15mm nominal bore.	9	Each	
21	P & F Grating of approved quality/make:			
21.1	Stainless Steel Sheet size 125mm dia.	15	Each	
22	Labour Charges for removing WVC pan:			
22.1	Indian/Orissa pan	1	Each	
23	Providing and fixing double leaf 1mm thick pressed steel shutters prepainted on both sides(godrej almirah types) for cupboard with pressed steel frame section 80×25mm made of 1mm thick ms sheet fixed with 3 nos. each side butt hinges and with fitting such as locking arrangment and handles of standard sizes(front area measured for payment)	40	sqm	
	Total Of Part- A (Civil)			
	PART B- ELECTRICAL			
1	S&F following sizes (dia.) of ISI marked medium duty PVC conduit along with accessories in surface / recessed using saddles, clamps, fastener as required including cutting the wall, covering conduit and making good the same as required. (Make: AKG, BEC, Precision, Polypack, Polycab)			
1.1	20 mm	R. mtr.	50.0	
1.2	25 mm	R. mtr.	200.0	
2	Wiring of light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) of approved make in surface / recessed ISI marked medium duty PVC conduit & it's accessories, round tiles,Hot Dipped Galvanized Modular Box with earth terminal, 6 A Modular switch,Modular plate with grid plate, screws, making connections, testing etc. as required. (Make BSR Group-1)			
2.1	Short point (up to 3 mtr.), Gr.I	P. point	10.0	
2.2	Medium point (up to 6 mtr.)	P. point	50.0	

2.3	Long point (up to 10 mtr)	P.	20.0	
3	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required. (RR Kabel, National, Finolex)	point	20.0	
3.1	3x 1.5 sq.mm	Mtr.	100.0	
3.2	2 x 2.5 sq. mm. + 1x1.5sqmm	Mtr.	300.0	
3.3	2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	Mtr.	100.0	
3.4	4 x 6.0 sq.mm, Gr.I	Mtr.	30.0	
3.5	2 x 6.0 sq. mm. + 1 x 2.5 sq. mm.	Mtr.	30.0	
3.6	1 x 10.0 sq.mm	Mtr.	15.0	
4	Supplying and drawing PVC/ Polythene insulated and PVC sheathed unarmoured/ armoured telephone cable with 0.5 mm dia. Tinned / annealed copper conductor taped &confirming to ITD specification S/WS -113C of approved make in existing surface or recessed conduit/casing capping.			
4.1	Unarmoured Telephone cable in existing surface or recessed conduit/casing capping. Delton, Finolex, National, RR Kabel, Polycab, Havell's			
a	3 pair	Mtr.	50.0	
5	P&F 240/415 V AC MCB with positive isolation of breaking capacity not less than 10 KA (B/ C/ D tripping characteristic) ISI marked IS 8828(1996)]/ conforming to IEC 60898 in existing board/sheets including making connections with lugs, testing etc. as required. (Make: Schneider (neo break), Siemens, GE (G2000), ABB, Legrand (Ekinoxe / Lexic))			
5.1	Single pole MCB			
a	0.5 A to 5 A rating	Each	3.0	
b	6 A to 32 A rating	Each	12.0	

5.2	Triple pole MCB			
a	6 A to 32 A rating	Each	3.0	
b	40 A 63 A rating	Each	9.0	
6	P&F 240/415 V isolator conforming to IS:13947-III/ IEC 60947-3 on existing board / sheet including making connections, testing etc. as required. (Make: Schneider (neo break), Siemens, GE (G2000), ABB, Legrand (Ekinoxe / Lexic))			
6.1	Four pole Isolator			
a	63 A rating	Each	8.0	
7	P&F 240/415 V Residual current circuit breaker conforming to IS:12640:1988/ IEC 61008 on existing board/sheet including making connections, testing etc. as required. (Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270))			
7.1	Two pole 30 mA sensitivity			
a	25 A rating	Each	3.0	
8	P&F Recessed/ Surface mounting heavy duty horizontal type sheet steel Distribution board phophatised/ powder painted complete with suitable rating insulated copper bus bar, shorting link, neutral link, earth link and din bar,masking sheet, conforming to IS13032 & IS8623 including making internal DB terminations with copper lugs, testing etc. as required. (Make: Schneider (neo break), Siemens, GE (G2000), ABB, Legrand (Ekinoxe / Lexic))			
8.1	Double door (Three phase)			
a	6 Way	Each	2.0	
9	P&F metal clad industrial plug top & socket unit with pin and sleeve type contact on porcelain/ bakelite base in sheet steel enclosure (without MCB) including making connections with lugs, testing etc.as required.(Make: Siemens, L&T(Hager), GE, Legrand, Schneider, ABB)			
9.1	Single / Double Pole (Three pin)			
a	20 A	Each	6.0	

B # 600

9.2	Three / Four pole (Five pin)			
a	30A-32A	Each	6.0	
10	P & F following modular accessories made out of unbreakable and fire retardant poly carbonate with silver contacts including making connections testing etc. as required (Make: Legrand (Myrius), ABB (Classic Luminia), Anchor (Wood), Schneider (Opale), Philips, Havell's (Crabtree))			
10.1	6 A one way switch	Each	10.0	
10.2	16 A one way switch	Each	102.0	
10.3	6 A 3 pin shuttered socket	Each	30.0	
10.4	16 A 6 pin shuttered socket	Each	90.0	
10.5	RJ-11 telephone jack single two line	Each	4.0	
10.6	RJ-45 computer jack with shutter	Each	12.0	
10.7	5 step fan regulator 2 Module	Each	18.0	
10.8	Blanking plate	Each	6.0	
11	P & F following size mounting grid plates with cover plates. (Make: Legrand (Myrius), ABB (Classic Luminia), Anchor (Wood), Schneider (Opale), Philips, Havell's (Crabtree))			
11.1	3 Module	Each	18.0	
11.2	5/6 Module	Each	60.0	
13	P & F following size hot dip galvanized M.S. box with earthing terminal in recess/ surface suitable for modular accessories as required. (Make: Legrand (Myrius), ABB (Classic Luminia), Anchor (Wood), Schneider (Opale), Philips, Havell's (Crabtree))			
13.1	3 Module	Each	18.0	
13.2	5-6 Module	Each	60.0	

14	SITC of wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly treated for derusting in 7 tank process with dephosphating and with powder coating on both side of panel in desired shade. The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness, separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with / without detachable extension type structure. (only outer area on all sides shall be measured & panel to be fabricated from CPRI approved fabricator)	Sqm	7	
15	Supplying and fixing of Aluminium / Copper bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC sleeves.			
15.1	Electrolytic grade Aluminium bus bar	Kg	4	
16	SF of (0-500) V range Volt meter on existing panel , making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required.			
16.1	Digital type, Gr.I	Each	1	
17	SF of CT operated direct reading type Ampere meter on existing panel, making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required.			
17.1	Digital type, Gr.I			
a	Below 500 A, Gr.I	Each	1	
18	SF of Current Transformer , with all necessary support in existing panel including connection etc. as required .			
18.1	from 200 / 5 to 400/5 Ratio , 10 VA , class 1 accuracy, Gr.I	Each	3	
19	SF of selector switch of 10 A for voltmeter (4 position ) including making connection etc. as required .Gr. 1	Each	1	

20	SF of CT linked selector switch of 10 A for Ampere meter (4 position ) including making connection etc. as required .Gr.1	Each	1	
21	SF of 110/220 V, LED (22.5 mm dia ) Indicating lamp with integral circuit, terminal block, including connection etc. as required.			
21.1	Red/yellow/Green colour, Gr.I	Each	2	
21.2	Blue colour, Gr.I	Each	1	
22	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 60947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs & spreaders, etc. as required.			
22.1	With Thermal Magnetic release			
a	up to 100 Amp , 25 kA, fixed O/L & S/C setting	Each	2	
b	$250~\mbox{Amp}$ , $35~\mbox{kA}$ , adjustable O/L & fixed S/C setting, Ics = $100~\%$ Icu, Gr.I	Each	1	
23	Supply and fixing of following accessories for MCCB			
23.1	Extended Rotary Handle	Each	1	
24	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I / IS:7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand,IInd class bricks covering, refilling earth,compaction of earth, making necessary connection, testing etc. as required of size.			
24.1	25.0 Sq.mm			
a	4 core Armoured	Mtr.	50.0	
24.2	70.0 Sq,mm			
a	3.5 core	Mtr.	120.0	

25	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, heavy duty aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size.			
25.1	4 x 25.0 sq.mm	Set	4.0	
25.2	3.5 x 70.0 sq.mm	Set	2.0	
26	Plate Earthing as per IS:3043 with copper Earth plate of size 300mm x 300mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 25 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple ,wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required. (Make BSR Group-1)	Set	2.0	
27	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.			
27.1	8 SWG G.I. ( Hot Dipped ) Wire	Mtr.	20.0	
28	P & F Star rated double ball bearing capacitor start, aluminium body & blade ceiling fan with down rod up to 30 cm with 3 x 1.5 sq.mm pvc insulated flexible copper conductor making connection testing etc. as required. (Almonard, CG, Khaitan, Bajaj, Usha, Orient, , Havell's, Polar).			
28.1	1200 mm Sweep 5 Star rated, Gr.I	Each	12.0	
29	P&F of Heavy duty capacitor start, Double ball bearing 900/1400 RPM single phase ISI marked Exhaust fan,IS:2312 marked in existing opening including making connections testing etc. as required. (Almonard, CG, Khaitan, Bajaj, Usha, Orient, , Havell's,Polar).			
29.1	450 mm sweep(900/1400 RPM)	Each	6.0	

30	P & F extra down rod of 15 mm dia . ERW (Electrical resistance welded ) of 1.6mm nominal thick medium duty steel pipe including cutting, threading, drilling, fixing quarter pin etc as reqd.	Mtr.	54.0	
31	P & F of IP20 LED Recessed / Surface Mounted, Round / Sqaure Non-Dimmable Downlight with die-cast aluminum housing & Heat Sink for heat dissipation, high purity reflector with external driver having efficiency > 85% and in compliance to IEC standards. Power Consumption of $\leq 7W/10W/15W/18W$ with $\sim 500/750/1100/1250$ lumens, System Lumen efficacy of 70 lm / watt output suitable to replace $1x18W/2x18W/2x$ 26W CFL Downlights, life time of 50000 Burning Hours with 70% of intial Lumen maintaned. CCT 3000°K , 4000°K & 6000°K. Fixture shall be CE compliance.			
31.1	Recessed Mounting			
a	LED Downlight 14/15W, Gr.I	Each	36.0	
32	P & F of IP20 LED ceiling / recessed / suspended mounting light fixture made from CRCA sheet steel housing, high purity / transmisivity diffuser for uniform light distribution. High efficiency driver electronics having efficiency > 85% and in compliance to IEC standards (Integral with light fixture). Power Consumption of 40W / 50W / 60W ~ 3000/3300/4200 lumens, System lumen efficacy of 70 - 80 lm/Watt output suitable for 2x36WFTL / 2x36W CFL / 3x36W CFL light fixtures, life time of 50,000 burning hours with 70% initial lumens maintained. CCT 3000°K, 4000°K & 6000°K. Fixtures shall be CE compliance.			
32.1	Recessed Mounting			
a	36W LED light fixture 2'x2' with acrylic / prismatic front cover.	Each	6.0	
33	Supply, Drawing and Testing of 4 pair, 24 AWG UTP Cat 6 Cable as per latest ammendments of TIA /EIA 568 B.2-1 Specifications in existing MS/PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required. Amp, Avaya, Molex, Penduit, Dax	Mtr.	100.0	

Total Of Part- B (Electrical)  Grand Total (A+B)			
Supply and Installation of Information outlets made of high impact plastic body ABS FR Grade with spring loaded collapsible shutters in jack Recess, suitable for Cat 6 application complying to latest ammendments EIA/ TIA 568 B.2-1 Specifications in existing modular /MS Boxes along with necessory connections as required. Amp, Avaya, Molex, Penduit, Dax	Each	12.0	

I/We hereby agree to execute the work on the above mentioned rates and term condition, total amounting to Rs...... for the entire work and on the enclosed terms and condition of contract of the Institute.

Signature of the contractor with seal
Address:
Mobile No
e-mail Id:

To be submitted in Envelope marked as - B