CENTRAL INSTITUTE OF TECHNOLOGY BALAGAON, KOKRAJHAR, BTAD, ASSAM



TENDER DOCUMENT

NIT NO: CITK/MC/NIT/405/2020/1207 Dt.- 04/12/2020

Part - A: Technical Bid

NAME OF WORK

Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar.

Name of Work: Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar.

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INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR TENDERING

- 1. The intending bidder must read the terms and conditions of Tender document carefully. He should submit his bid if he considers himself eligible and he is in possession of all the certificates / documents required.
- 2. Information and Instructions for bidders for tendering posted on website shall form part of bid document.
- 3. The bid document consisting of NIT, plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from www.cit.ac.in.
- 4. The bid can be submitted only after depositing Tender Fee in favor of CIT Kokrajhar and uploading the mandatory scanned documents as specified within the period of bid submission.
- 5. Copies of eligibility documents and EMD as specified in the notice inviting tender shall be submitted within the period of tender submission.
- 6. Bidders must ensure to quote rate of each item. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
- 7. Financial bids shall be opened only for bidders for whom EMD and other documents are found in order and who are found to be eligible to bid for work.
- 8. If the contractor is found ineligible after opening of bids, his bid shall become invalid

9. List of Eligibility Documents to be submitted within the period of bid submission:-

- (a) Demand Draft of any scheduled Bank against EMD in favor of CIT Kokrajhar.
- (b) Certificates of Work Experience and Completion Certificate of Similar work from Client.
- (c) Certificate of Registration for GST and acknowledgement of up to date filed return if required.
- (d) Copies of Contractor's License.
- (e) Copies of ESI Registration.
- (f) Copies of EPF Registration, PAN Card.
- (g) Details of Work Completed during last 07 (Seven) Years and Detailed Information of Bidder duly completed and signed by the Bidder.
- (h) Declarations to be given by the Tenderers.
- (i) Filled copied of all Proforma, Annexures and Forms as mentioned in NIT.
- (j) Profit and Loss Statement, Balance Sheet and Income Tax Return duly audited by Chartered Accountant.

- 10. The Technical Bid(s) shall be opened first by the Committee on 23/12/2020 at 15:00 Hrs. The Financial Bid(s), whose Technical Bid) s found to be eligible, will be opened on 28/12/2020 at 14:00 hrs. After the evaluation of the Bid(s) CIT Kokrajhar will award the contract to the Lowest Evaluated Responsive Tenderer. Conditional Bid(s) will be treated as unresponsive and will be rejected.
- 14. EMD, Tender Fees and Self attested hard copies of all supporting documents, Technical Bid in sealed envelope to be submitted on or before last date of submission of bid through person or through courier at the office of Engineering Cell, CIT Kokrajhar. Documents received after the bid submission date will not be considered for further evaluation process.

CIT Kokrajhar will not be responsible for any kind of delay in delivery of the documents and also any problem arise during uploading of the documents in procurement portal.

- 15. Information & Instruction for Contractor will form Part of NIT.
- 16. This detailed NIT (Technical Bid) will be part of the contract agreement.

Sd/-

Registrar,

Central Institute of Technology Kokrajhar



CENTRAL INSTITUTE TECHNOLOGY, **KOKRAJHAR**

Kokrajhar - 783370, Assam

NOTICE INVITING TENDER (EC-6 for Bidding)

Registrar, CIT Kokrajhar invites item rate tenders from eligible Contractors or who are on the approved list of the appropriate class of Central Public Works Department, State Public Works Department, Railways, Military Engineering Services, BSNL and Road & Bridges central or state government, Government autonomous bodies with

proven technical and financial capabilities for the following work:

Name of work	Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar
Tender (NIT) No	CITK/MC/NIT/405/2020/1207 Dt 04/12/2020
Estimated Cost	Rs. 2,800,000.00
Tender Fees (Non – Refundable) DD in favour of "CIT Kokrajhar"	Rs. 1,000.00
Earnest Money	2% for general and 1% for ST/SC/OBC
Contract Period	6 Months
Date of issue of tender paper	14/12/2020 to 21/12/2020
Last Date & time of submission of tender	23/12/2020 Upto 14:00 Hrs.
Technical Bid Opening Date & Time	23/12/2020 at 15:00 Hrs.
Price Bid Opening Date & Time	28/12/2020 at 14:00 hrs
Pre- Bid Meeting	18/12/2020 at 11:00 Hrs.

Intending Bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority of having satisfactorily completed similar works.

- 1. The indenting Bidder must read the Terms & conditions of CIT Kokrajhar carefully. He/They should only submit his/her/their bid if he/she/they consider himself/themselves eligible and he/she/they is/are in possession of all the documents required.
- 2. Information and Instructions for bidders posted on website shall from part of bid document.
- 3. The Bid documents consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms & conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.cit.ac.in.
- 4. Eligibility Criteria:-

Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below. Joint ventures are not allowed.

Experience of having successfully completed similar works, during the last 7 years, ending previous day of last date of submission of bids.

(a) Three (03) similar works, each of value not less than 40% of estimated cost put to tender

or

Two (02) similar works each of value not less than 60% of estimated cost put to tender

or

One (01) similar work of value not less than 80% of estimated cost put to tender in last 07 (Seven) Years ending previous day of last date of submission of bids.

Similar work means" All civil works involved in construction of road, footpath".

- (b) Sub-Contractor for Electrical work For Electrical works, the contractor shall get it done through a sub-contractor having valid Electrical license with appropriate class and required experience.
- (c) The Bidder should have registration with Employee Provident Fund (EPF), PAN Card, GST Registration, Contractor License, Commissioner and Employee State Insurance (ESI) Corporation.
- (d) The experience of similar work should be from Central Govt., State Govt., PSU and Govt. Autonomous Body.
- (e) Latest Solvency Certificate of **40% of the Estimated Cost** from any Nationalized Bank of with one year from the last date of tender to be submitted.
- (f) Bidder mast have average annual turn over on construction works of last three consecutive year costing not less than 50% of the estimated cost put to tender.

Preparation & Submission of Tender through Online. The Tender should be submitted in 02 (Two) parts i.e. Technical Bid and Financial Bid Respectively. The Technical Bid should be sent by the Bidder as "Technical Bid" for "Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar".

Earnest Money Deposit. The bidder shall be required to submit the Earnest Money Deposit (EMD) by way of Demand Drafts/Banker's Cheque only. EMD submitted in the form of Bank Guarantee or any other form except as stated above will NOT be accepted and tender will be summarily rejected. No interest shall be paid by the Institute on the Earnest Money deposited by the tenderer. The EMD of the successful Bidder shall be returned after the successful submission of Bank Guarantee/Security Deposit and for unsuccessful bidder(s) it would be returned after Award of the Contract. Bid(s) received without Demand Drafts of EMD will be rejected. The

Earnest Money of the unsuccessful tenderer will be refunded within 30 days after financial evaluation.

The Tender paper/documents can be seen/ downloaded from website. For any query, Engineering Cell, CIT Kokrajhar, may be contacted.

The competent authority on behalf of the Registrar, CIT Kokrajhar does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.

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 to rejection.

This detailed NIT (Technical Bid) will be part of the contract agreement.

Sd/Registrar,
Central Institute of Technology Kokrajhar

CENTRAL INSTITUTE OF TECHNOLOGY KOKRAJHAR

Item Rate Tender & Contract for Works

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"Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar"

(i)	To be submitted by hours on to/upload at
(ii)	To be opened in presence of tenderers who may be present at
	hours on in the office of

TENDER

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

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

I/We agree to keep the tender open fordays from the due date of its opening in case of single bid system.......from the date of opening of technical bid in case tenders are invited on 2/3 bid/system for specialised work and not to make any modification in its terms and conditions.

A sum of Rs......is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money.

A copy of earnest money in receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank is scanned and uploaded (strike out as the case may be). If I/We, fail to furnish the prescribed performance performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to

commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

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

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated

Witness:	Postal Address
Address:	
Occupation:	
АССЕ	PTANCE
` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	ou as provided in the letters mentioned hereunder) is of the Registrar, CIT Kokrajhar for a sum of Rs.
(Rupees	
)	
The letters referred to below shall for	orm part of this contract agreement:-
(a)	
(b)	
(c)	

Signature of Contractor

	For & on behalf of the CIT Kokrajhar.
	Signatures
Dated:	Designation

General Rules, Directions & Special Conditions

- 1. Rates shall be quoted in the Bill of Quantity (BOQ) furnished in figures and in words. If there is any variation between the rates quoted in figures and rates quoted in words, the rates quoted in words shall be considered. The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one.
- 2. The rates shall be firm up to the completion of work. No price escalation will be paid on any account.
- 3. The work shall be completed as per time schedule given in Schedule 'F'.
- 4. The rate shall be inclusive of all taxes including GST, Royalty, loading, unloading and transportation etc. of all the materials to work site at CIT Kokrajhar campus, Kokrajhar-783370. All taxes as applicable to the work as per state/central government shall be deducted from the bills.
- 5. All the pages of the tender document shall be signed and dated at the lower right hand corner by the tenderer. If the tender is signed by a person holding power of attorney, power of attorney authorizing him to sign on behalf of the tenderer should be submitted along with the tender.
- 6. 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.
- 7. The documents submitted along with the application for tender in respect of Experience, registration will be verified by the Institute with respect to that stated in the NIT for qualifying for the tender. If after verification any such data/information are not found true or tenderer has attempted to conceal any unfavorable data/information, his/her tender shall be summarily rejected.
- 8. The owner reserves the right to take inputs regarding performance of a tenderer on any similar work (on-going or completed) from a client whether disclosed in the tender or not. If any such report from the client is found to be unsatisfactory, the tender is liable to be rejected.
- 9. Any tender submitted without the qualifying documents mentioned in the relevant clause of NIT, it shall be considered as incomplete tender and the tender will be rejected for which no communication will be made.
- 10. Original or attested copies of work order as well as completion certificates from the client should be attached by the tenderer. Otherwise it will not be considered towards qualification.
- 11. If any information furnished by the tenderer is found incorrect at a later stage, he shall be liable to be debarred from tendering/ taking up of works in CIT KOKRAJHAR. The Institute reserves the right to verify the particulars furnished by the applicant independently.
- 12. In case the work involves electrical works, the tenderer must have electrical contract license and if the tenderer does not have such license they should submit

- and undertaking to engage a party which fulfills the qualifying criteria. In such cases, Electrical License with his acceptance to take up the work shall be submitted. In case of specialized jobs like Air Condition works the contractor shall engage party having required experience.
- 13. The Earnest Money shall be paid in the form of Demand Draft/ Banker's cheque drawn in favour of "CIT Kokrajhar" payable at 'Kokrajhar'. EMD submitted in the form of Bank Guarantee or any other form except as stated above will NOT be accepted and tender will be summarily rejected. No interest shall be paid by the Institute on the Earnest Money deposited by the tenderer. The Earnest Money of the unsuccessful tenderer will be refunded.
- 14. Any abnormal rate quoted in the tender will make the tender liable to be rejected for which no communication will be made.
- 15. The CIT Kokrajhar does not bind himself to accept the lowest tender and reserves itself the right to reject any or all the tenders received without assigning any reason thereof. The work may be allotted in part for whole at the discretion of competent authority of the institute.
- 16. Reasonability of the rates quoted by the tenderers shall be determined by comparing to the justified estimated rates. If the lowest bid is too low and the tender evaluation committee feels that it is not possible to do the work as per specification, the tender shall be cancelled.
- 17. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.
- 18. If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Tender Committee members and Engineer-in-Charge, and the lowest contractors those have quoted equal amount of their tenders.
- 19. In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited.
- 20. In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors.
- 21. Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work.
- 22. 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 proved 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 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 item(s) will be considered as zero and work will be required to be executed accordingly.
- 23. However, if a tenderer quotes nil rates against each item in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer and earnest money deposited shall be forfeited.
- 24. The contractor whose tender is accepted, will be required to furnish Performance Guarantee of 5% (five) of the tendered amount within the period specified in Schedule 'F' from the date of issue of LOI. If contractor fails to furnish the prescribed performance guarantee within the prescribed period, tender will be cancelled and the earnest money deposited by him is absolutely forfeited without any notice. In case of forfeiture of earnest money, the bidder shall not be allowed to participate in the re-tendering process of the work.
- 25. If the lowest bid is below 10% of the estimate, additional Performance Guarantee of the value by which the quote is below 10% of the estimate will have to be submitted by the contractor along with the specified initial Performance Guarantee within time limit specified for initial Performance Guarantee, failing which, tender will be cancelled after forfeiting of EMD and debarring the lowest bidder for 3 years from participating in the tenders floated by the Institute. In case the lowest bidder is not able to complete the work, the Security Deposit, Performance Guarantee and the additional Performance Guarantee will be forfeited and the contractor will be debarred for 3 years from participating in the tenders floated by the Institute after issuing a show case notice. In other cases, the additional Performance Guarantee shall be refunded after issue of Completion certificate.
- 26. The initial and additional Performance Guarantee will be in the form as specified in the tender.
- 27. Lowest quotes above 10% of the justified estimate will not be accepted in any case, and fresh tender will be invited.
- 28. Negotiation with lowest bidder, if more than 10% above the justified estimate, to be held in exceptional cases but **not for bids more than 20% above**, in any case. If lowest bidder withdraws, fresh tender will be invited.
- 29. 5% of the Bill Value will be deducted as Security Deposit and will be released after 12(twelve) months from the date of issue of 'Completion Certificate' or certification of final bill, whichever is later. Any damage or defect in the work during this period due to materials supplied by the contractor or bad workmanship shall be rectified or replaced by the contractor at his own cost or the Engineer–in-charge may cause the same to be made good by other workman and deduct the expenses from the security deposit. No interest will be paid on security deposit.

- 30. Care shall be taken by the contractor to avoid damage to any part of the building or its finishing. He shall be responsible for repairing all damages and resorting the same to their original finish at his own cost. He shall also remove at his own cost all unwanted wastage and materials arising out of his work from the site.
- 31. 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.
- 32. The contractor shall arrange all the plants, equipment, machineries etc. required for the works for which no extra charges will be paid.
- 33. The contractor will arrange for water and electricity at his own. However, the Institute may provide electricity on the request of the contractor, depending upon the availability of spare power, on payment basis under the terms and conditions fixed by the institute.
- 34. All Specification of the work will be as per latest CPWD specification with up to date correction slips or as per special specifications annexed with the tender.
- 35. All legal disputes will be subjected to jurisdiction of Kokrajhar District Court only.
- 36. All other terms & conditions shall be as per provision of 'General Conditions of Contract' followed by the institute.

CERTIFICATES AND PAYMENTS

(** GCC Conditions will prevail in case of any ambiguity in this section **)

1. SCHEDULE of RATES and PAYMENTS

(i) Contractor's Remuneration

The price to be paid by the Owner to Contractor for the whole of the work to be done and the performance of all the obligations undertaken by the Contractor under the contract documents shall be ascertained by the application of the respective schedule of rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with the succeeding subclause of this clause) and payment to be made accordingly for the work actually executed and approved by the Engineer-in-Charge, the sum so ascertained shall (excepting only as and to the extent expressly provided herein) constitute the sole and inclusive remuneration of the Contractor under the contract and no further other payment whatsoever shall be or become due or payable to the Contractor under the contract.

(ii) Schedule of Rates to be Inclusive

The price/ rates quoted by the Contractor shall remain firm till the issue of final certificate and shall not be subject to escalation. Schedule of rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risk of every kind to be taken in executing, completing and handing over the work to the Owner by the Contractor. The Contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required though the contract document may not fully and precisely furnish them. He shall make such provision in the schedule of rates as he may consider necessary to cover the cost of such items of work and materials as may be reasonable and necessary to complete the works. The opinion of the Engineer-in-Charge as to the items of work which are necessary and reasonable for completion of work shall be final and binding on the Contractor, although the same may not be shown on or described specifically in contract documents.

Generally of this present provision shall not be deemed to cut down or limited in any way because in certain cases it may and in other cases it may not be expressly stated that the Contractor shall do or perform a work or supply articles or perform services at his own cost or without addition of payment or without extra charge or words to the same effect or that it may be stated or not stated that the same are included in and covered by the schedule of rates.

(iii) Schedule of Rates to cover constructional Plant, Materials, Labour etc.

Without in any way limiting the provisions of the proceeding sub-clause the schedule of rates shall be deemed to include and cover the cost of all constructional plant, temporary work (except as provided for herein), pumps,

materials, labour, insurance, fuel, stores, and appliances to be supplied by the Contractor and all other matters in connection with each item in the schedule of rates and the execution of the works or any portion thereof finished, complete in every respect and maintained as shown or described in the contract documents or may be ordered in writing during the continuance of the contract.

(iv) Schedule of Rate to Cover Royalties, Rents and Claims

The schedule of rates shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, patent or otherwise incorporated in or used in connection with the works, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the works and shall include and indemnity to the Owner which the Contractor here-by gives against all actions, proceedings, claims damages, costs and expenses arising from the incorporation in or use on the works of any such articles, processes or materials. Octroi or other municipal or local board charges if levied on materials, equipment or machineries to be brought to site for use on work shall be borne by the Contractor.

(v) Schedule of Rates to cover Taxes and Duties

No exemption or reduction of customs duties, excise duties, sales tax, contract quay or any port dues, transports charges, stamp duties or Central or State government or local body or Municipal Taxes or duties, taxes or charges (from or of anybody), whatsoever, will be granted or obtained, all of which expenses shall be deemed to be included in and covered by the schedule of rates. The Contractor shall also obtain and pay for all permits or other privileges necessary to complete the work.

(vi) Schedule of rates to cover Forest Royalties.

All the responsibilities for obtaining all forest permits and payment of forest royalties etc. for use of all forest produces shall lie with the contractor. The contractor shall deposit royalty and obtain necessary permit for supply of all forest produces from local authorities. If pursuant to or under any law, notification or order, any royalty, cess or the like becomes payable by the Institute and does not any time become payable by the contractor 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. The schedule of rates shall be inclusive of all forest royalties, monopolies and all admissible taxes from time to time as per rules of Government of Assam.

(vii) Schedule of Rates to cover Risks of Delay

The schedule of rates shall be deemed to include and cover the risk of all possibilities of delay and interference with the Contractor's conduct for work which occur from and cause including orders of the Owner in the exercise of his powers and on account of extension of time granted due to various reasons and for all other possible or probable causes of delay.

(viii) Schedule of Rates cannot be altered

For work under unit rate basis, no alteration will be allowed in the schedule of rates by reason of works or any part of them being modified altered, extended,

diminished or omitted. The schedule of rates are fully inclusive rates which have been fixed by the Contractor and agreed to by the Owner and cannot be altered.

For lump sum contracts, the payment will be made according to the work actually carried out, for which purpose an item-wise, or work-wise, schedule of rates shall be furnished, suitable for evaluating the value of work done and preparing running account bills. Lump sum contracts shall also allow for any increase or decrease in the total quantity of work up to approximately 10% for the quoted price and the contract value shall be adjusted accordingly.

2. Procedure for Measurement/Billing of Work in Progress

(i) Measurements

All measurements shall be in metric system. All measurement of all the items having financial value (more than 15.00 lacs) shall be entered by the contractor and complied in the shape of 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 work performed under the contract. The measurement upto 15.00 lacs shall be recorded in the conventional M.B. For computerized Measurement Book, all such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of work.

The contractor would initially submit draft computerized measurement sheet and these measurements would be got checked/tests checks in his draft computerized measurements, and submit to the department a computerized measurement Book, duly bound, and with its pages numbered. The Engineer In Charge and/or his authorized representative would thereafter check this MB.

After the necessary corrections made by the Engineer in Charge, the measurement sheet shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer In Charge for signatures by the Engineers in Charge and the contractors or their representatives in token of their acceptance. For the purpose of taking joint measurement the Contractor's representative shall be bound to be present whenever required by the Engineer-in-Charge. If, however he is absent for any reason whatsoever the measurements will be taken by the Engineer-in-Charge or his representative and this will be deemed to be correct and binding on the Contractor.

(ii) Billing

The final fair computerized measurement Book along with Abstract of Cost and the bill based on these measurements (with two separate copies of the Bill) given by the contractor, duly bound, with each pages numbered should be 100% correct, and no cutting or overwriting in the measurements would thereafter be allowed. If at all any error is noticed, the contractors shall have to be submit a fresh computerized MB with its page duly numbered and bound, after getting the earlier MB cancelled by the department. Thereafter the MB shall be taken in the Engineering/Maintenance cell records and allotted a number as per the registrar of Computerized MBs. This should be done before the correspondence bill is submitted to the Finance & A/c's section 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 submit the bill in approved Performa in quadruplicate to the Engineer-in-Charge of the work giving abstract and detailed measurements for the various items executed. The Engineer-in-Charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible.

iii) Secured Advance on Materials

In case of tenders for completed item of work, Contractor may be allowed 'Secured Advance' on the security of materials brought to site for execution of the contracted item of work to the extent of 75% of the value of materials as assessed by the Engineer-in-Charge provided that the materials are of an imperishable nature and that a formal agreement is drawn up with the Contractor under which the Owner secures a lien on the materials and is safeguarded against losses due to the Contractor postponing the execution of the work or to the storage or misuse of the materials and against the expense entitled for their proper watch and safe custody. Recoveries of advances so made would not be postponed until the whole of the work entrusted to the Contractor is completed. They should be adjusted from his bills for work done as the materials are used, the necessary deductions being made whenever the items of work in which they are used are billed for.

(iv) Dispute in Mode of Measurement

In case of any dispute as to the mode of measurement not covered by the contract to be adopted for any item of work, mode of measurement as per latest Indian Standard Specifications shall be followed.

3. Running Account Payments to be Regarded as Advances

All running account payments shall be regarded as payment for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof, in this respect, or of the accruing of any claim by the Contractor, nor shall it conclude, determine or affect in any way the powers of the Owner under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor within one month of the date of physical completion of the work, otherwise, the Engineer-in-Charge's certificate of the measurement and of total amount payable for the work accordingly shall be final and binding on all parties.

4. Notice of Claims for Additional Payment

Should the Contractor consider that he is entitled to any extra payment or compensation or to make any claims whatsoever in respect of the works he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment and/or compensation. Such notice shall be given to the Engineer-in-charge within ten days from the ordering of any work or happening of any event upon which the contractor bases such claims and such notice shall contain full particulars of the nature of such claim with full details and amount

claimed. Failure on the part of the Contractor to put forward any claim with the necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by the Owner to reject any such claim and no delay in dealing therewith shall be waiver by the Owner of any rights in respect thereof.

5. Receipt of Payment

Receipt for payment made on account of work when executed by a firm, must be signed by a person holding due power of attorney in this respect on behalf of the Contractor, except when the Contractors are described in their tender as a limited company in which case the receipts must be signed in the name of the company by one of its principal officers or by some other person having authority to give effectual receipt for the company.

Payment to the Contractor will be made as and when availability of fund in concern department.

6. Completion Certificate

6.1 Application for Completion Certificate

When the Contractor fulfil his obligation under clause 65 of Schedule D shall be eligible to apply for completion certificate. The Contractor may apply for separate completion certificate in respect of each such portion of the work by submitting the completion documents along with such application for completion certificate.

The Engineer-in-charge shall normally issue to the Contractor the completion certificate within one month after receiving and application therefore from the Contractor after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawings and the contract documents.

The Contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

6.2 Completion Certificate

Within one month of the completion of the work in all respects, the Contractor shall be furnished with a certificate by the engineer-in-Charge of such completion, but no certificate shall be given nor shall the work be deemed to have been executed until all scaffolding, surplus materials and rubbish is cleaned of the site completely nor until the work shall have been measured by the Engineer-in-Charge whose measurements shall be binding and conclusive. The work will not be considered as complete and taken over by the Owner, until all the temporary works, labour and staff colonies etc.; constructed, are removed and the work site cleaned to the satisfaction of the Engineer-in-Charge.

If the Contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expenses of the Contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean of such dirt as aforesaid, and the Contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

6.3 Completion Certificate Documents

For the purpose of clause 6 the following documents will be deemed to form the completion documents.

- (i) The technical documents according to which the work was carried out.
- (ii) Three sets of construction drawings showing therein the modification and corrections made during the course of execution signed by the Engineer-in-Charge.
- (iii) Completion certificate for 'embedded' and 'covered' up works.
- (iv) Certificates of final levels as set out for various works.
- (v) Certificates of tests performed for various works.
- (vi) Materials appropriation Statement for the materials issued by the Owner for the works and list of surplus materials returned to the Owner's store duly supported by necessary documents.

7. Final Decision and Final Certificate

Upon expiry of the period of liability and subject to the Engineer-in-Charge being satisfied that the works have been duly maintained by the Contractor during monsoon or such period as herein before provided in clause 71.1 and that the Contractor has in all respect duly made up any subsidence and performed all his obligations under the contract, the Engineer-in-Charge shall (without prejudice to the rights of the Owner to retain the provisions of relevant clause hereof) otherwise give a certificate herein referred to as the final certificate to that effect and the Contractor shall not be considered to have fulfilled the whole of his obligations under the contract until Final Certificate shall have been given by the Engineer-in-Charge not withstanding any previous entry upon the work and taking possession, working or using of the same or any part thereof by the Owner.

Note:- Security Deposit amount will not be released without Final Certificate.

(i) Certificate and Payments no Evidence of completion

Except the final certificate, no other certificates or payments against a certificate or on general account shall be taken to be an admission by the Owner of the due performance of the contract or any part thereof or of occupancy or validity for any claim by the Contractor.

TAXES AND INSURANCE

1. Taxes, Duties, Octroi etc.

The Contractor agrees to and does hereby accept full and exclusive liability for the payment of any and all taxes, duties, octrois etc. now or hereafter imposed, increased, or modified from time to time in respect of works and materials and all contributions and taxes for unemployment compensation, insurance and old age pensions or annuities now or hereafter imposed by any Central or State governmental authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the Contractor and the Contractor shall be responsible for the compliance with all obligations and restrictions imposed by the Labour Law or any other law affecting employer-employee relationship and the Contractor further agrees to comply and to secure the compliance of all sub-Contractors, with all applicable Central State, Municipal and local laws and regulations and requirements of any Central, State or Local, Government agency or authority. Contractor further agrees to defend, indemnify and hold harmless from any liability or penalty which may be imposed by the Central, State or Local authorities by reason of any violations by Contractor or sub-Contractor of such laws, regulations or requirements and also from all claims, suits or proceedings that may be brought against the Owner arising under growing out of, or by reason of the work provided for by this contract, by third parties, or by Central or State government authority or any administrative sub-division thereof.

1.1 All taxes viz. income tax, Sales Tax, Duties, Levies, GST, Building and other Construction Workers Welfare Cess or any other tax or Cess in respect of this contract applicable at the time of submission of this tender shall be payable by the Contractor and the Institute shall not entertain any claim whatsoever in this respect. Taxes, GST, Cess etc. shall be deducted as per applicable rules from the bills of the contractor at the rates prevailing on the day of submission of the tender

1.1.1 Income Tax

Income tax at the prevailing rate on the gross amount of the bill shall be deducted from the contractor's bill as per section 194C of the Income Tax Act.

1.1.2 **GST**

GST will be deducted at the prevailing rate on the value of the bill subject to submission of certificate of composition scheme by the contractor or else as admissible percentage as per relevant rules. If GST not deducted by the Owner, contractor shall have to pay GST to the Govt. as per prevailing rate on the value of the bill.

1.1.3 Cess for Building and other construction Workers' Welfare Board

1% cess will be deducted from the bills on account of Welfare of Building and other construction workers which will be deposited to Building and other construction Workers' Welfare Board formed by the Government of Assam.

Any increase in the rates of any existing taxes/duties/levies/royalties etc shall be borne by the Institute. If there are any decreases the amounts payable will be reduced accordingly.

- **1.1.4** Water charges @ 1% of the gross bill amount will be deducted if water supply is taken from CIT Kokrajhar departmentally.
- **1.1.5** Electrical charges as per actual meter reading shall be deducted from the bill. If connection is taken directly without installation of meter with prior permission from Engineer (Electrical), then amount as per the usage shall be deducted from the gross bill amount as suggested by Engineer (Electrical).

1.2. Variation of taxes:

Any fresh imposition of taxes, duties, levies etc, imposed after receipt of tender shall be reimbursed by the Institute on actual on production of proof of imposition of the tax.

2. Insurance

Contractor shall at his own expense carry and maintain insurance with reputable insurance companies to the satisfaction of the Owner as follows:

(i) Employees State Insurance Act

The Contractor agrees to and does hereby accept full and exclusive liability for compliance with all obligations imposed by the Employees State Insurance Act, 1984, and the Contractor further agrees to defend, indemnify and hold Owner harmless from any liability or penalty which may be imposed by the Central, State or Local authority by reason of any asserted, violation by Contractor or sub-Contractor of the Employees State Insurance Act, 1948, and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of or by reasons of the work provided for by this contract whether brought by employees of the Contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The Contractor agrees to fill in with the Employee's State Insurance Corporation, the Declaration Forms, and all forms which may be required in respect of the Contractors or sub-Contractors employees, whose aggregate remuneration is Rs. 15000.00 per month or such amount as prescribed under the Employees State Insurance Act, 1948 from time to time and who are employed in the work provided for or those covered by ESI from time to time under the Agreement. The Contractor shall deduct and secure the agreement of the sub-Contractor to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act form wages and affix the Employee's contribution Cards at wages payment intervals. The Contractor shall remit and secure the agreement of the sub-Contractor to remit to the State Bank of India, Employees' State Insurance Corporation. Account, the

Employees contribution as required by the Act. the Contractor agrees to maintain all cards and records as required under the Act in respect of employees and payments and the Contractor shall secure the agreement of the sub-Contractor to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the Contractor's or sub-Contractor's account.

The Owner shall retain such sum as may be necessary from the total contract value until the Contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948, have been paid.

(ii) Workman's compensation and employer's Liability Insurance

Insurance shall be affected for all the Contractor's employees engaged in the performance of this contract. If any of the work is sublet, the Contractor shall require the sub-Contractor to provide Workman's Compensation and employer's liability insurance for the latter's employees if such employees are not covered under the Contractor's Insurance.

(iii) Any other Insurance Required Under Law or Regulations or by Owner

Contractor shall also carry and maintain any and all other insurance which may be required under any law or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Owner.

(iv) The ESI and EPF contribution shall be paid by the contractor and maintain all the records which may be required under any law or regulation from time to time by the Owner.

3. Damage to Property

- (i) Contractor shall be responsible for making good to the satisfaction for the Owner any loss or and any damage to all structures and properties belonging to the Owner or being executed or procured or being procured by the Owner or of other agencies within the premises of all the work of the Owner, if such loss or damage is due to fault and/or the negligence or willful acts or omission of the Contractor, his employees, agents, representative or sub-Contractors.
- (ii) The Contractor shall indemnify and keep the Owner harmless of all claims or damage to property other than Owner's property arising under or by reason of this agreement if such claims result from the fault and/or negligence or willful acts or omissions of the Contractor, his employees, agent's representative or sub-Contractors.

CRITERIA FOR EVALUATION OF TECHNO-COMMERICAL BID TO QUALIFY FOR OPENING OF PRICE BID FOR AWARD OF WORK

1.0 Initial Criteria for eligibility

The Bidder should have satisfactorily completed Similar works during the last Seven years ending previous day of last date of submission of tenders as below.

Three similar works each costing not less than 40% of estimated cost or completed two similar works each costing not less than 60% of estimated cost or completed one similar work costing not less than 80% of estimated cost. The bidder should have had Average Annual Financial Turn over on **construction work** of costing not less than 50% of estimated cost during the last three consecutive years Balance sheets duly audited by Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.

The bidder should submit the audited balance sheet and profit and loss statement duly audited by CA.

The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract.

2.0 Evaluation Criteria

The detailed submitted by the bidders will be evaluated in the following manner:

The initial criteria prescribed in para 1.0 above in respect of experience of eligible similar works completed, loss, solvency and financial turn over etc. will first be scrutinized and the bidder's eligibility for the work be determined.

The bidders qualifying the initial criteria as set out in para 1.0 above will be evaluated for following criteria by scoring method on the basis of details furnished by them.

- (a) Financial strength (Form 'A' & 'B')

 Maximum 20 marks
- (b) Experience in eligible similar nature of work during last seven years (Form 'C')

 Maximum 20 marks
- (c) Performance on works (Form 'D') Time over run Maximum 20 marks
- (d) Performance on works (Form D') Quality Maximum 40 marks **Total** 100 marks

To become eligible for short listing the bidder must secure at least fifty percent marks in each (Section a, b, c & d) and sixty percent marks in aggregate.

CIT Kokrajhar, however, reserves the right to restrict the list of such qualified contractors to any number deemed suitable by it.

Note: The average value of performance of works for time over run and quality shall be taken on the basis of performance report and eligible similar works.

3.0 Financial information

Bidder should furnish the Annual financial statement for the last five year in (Form "A") and Solvency Certificate in (Form "B").

4.0 Experience of similar works

Bidder should furnish the list of eligible similar nature of works successfully completed during the last seven years in (Form "C").

5.0 Organization information

Bidder is required to submit the information in respect of his organization in Forms "E"

6.0 Letter of transmittal

The bidder should submit the Letter of Transmittal attached with the document

7.0 Opening of Price bid

After evaluation of applications, a list of shortlisted agencies will be prepared. Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representatives.

8.0 Evaluation of Price Bid

The tender accepting authority satisfies himself/herself about the reasonability of rates before acceptance of the tenders. Reasonability of rates is primarily assessed on the basis of justified cost.

Evaluation of the Price Bid (L1, L2, L3) will be done following the as prescribed in the NIT.

9.0 Award Criteria

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

- a) amend the scope of work and value of contract.
- b) Reject any or all the applications without assigning any reason.

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

10.0 Criteria for Evaluation of the Performance of Contractor for Pre-Eligibility:-

	Attributes	Marks	Evaluation					
a)	Financial Strength							
	Average annual turnover		60% marks for minimum eligibility criteria					
	(16 marks)	20	100% mar	ks for twice	the minimu	ım		
	Solvency Certificate		eligibility	criteria				
	(04 marks)				ı pro-rata ba			
b)	Experience in similar				um eligibili			
	class of works	20			the minimu	ım		
		20	eligibility					
			In between	<u> above – or</u>	n pro-rata ba	isis.		
c)	Performance on works	20						
	(time over run))						
	Parameter Calculation for	Score						
	If $TOR =$		1.00	2.00	3.00	>3.50		
	a) Without levy of compens		20	15	10	10		
	b) With levy of compensati		20	5	0	-5		
	c) Levy of compensation no	ot	20	10	0	0		
	decided							
	TOR = AT/ST, where $AT=$			Stipulated T	ime in the	Agreement		
	plus (+) justified period of	Extension						
d)	Performance of works			ig- 40 mark				
	(Quality)	40		1 - 30 marks	3			
			Good - 20					
			Poor - 0 m	arks				

11.0 Evaluation of Price Bid:-

- 1. Any abnormal rate quoted in the tender will make the tender liable to be rejected for which no communication will be made.
- 2. The CIT Kokrajhar does not bind himself to accept the lowest tender and reserves itself the right to reject any or all the tenders received without assigning any reason thereof. The work may be allotted in part for whole at the discretion of competent authority of the institute.
- 3. Reasonability of the rates quoted by the tenderers shall be determined by comparing to the justified estimated rates. If the lowest bid is too low and the tender evaluation committee feels that it is not possible to do the work as per specification, the tender shall be cancelled.
- 4. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.

- 5. If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Tender Committee members and Engineer-in-Charge, and the lowest contractors those have quoted equal amount of their tenders.
- 6. In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited.
- 7. In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors.
- 8. Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work.
- 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 proved 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 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 item(s) will be considered as zero and work will be required to be executed accordingly.
- 10. However, if a tenderer quotes nil rates against each item in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer and earnest money deposited shall be forfeited.
- 11. If the lowest bid is below 10% of the estimate, additional Performance Guarantee of the value by which the quote is below 10% of the estimate will have to be submitted by the contractor along with the specified initial Performance Guarantee within time limit specified for initial Performance Guarantee, failing which, tender will be cancelled after forfeiting of EMD and debarring the lowest bidder for 3 years from participating in the tenders floated by the Institute. In case the lowest bidder is not able to complete the work, the Security Deposit, Performance Guarantee and the additional Performance Guarantee will be forfeited and the contractor will be debarred for 3 years from participating in the tenders floated by the Institute after

- issuing a show case notice. In other cases, the additional Performance Guarantee shall be refunded after issue of Completion certificate.
- 12. The initial and additional Performance Guarantee will be in the form as specified in the tender.
- 13. Lowest quotes above 10% of the justified estimate will not be accepted in any case, and fresh tender will be invited.
- 14. Negotiation with lowest bidder, if more than 10% above the justified estimate, to be held in exceptional cases but not for bids more than 20% above, in any case. If lowest bidder withdraws, fresh tender will be invited.

INFORMATION REGARDING ELIGIBILITY

LETTER OF TRANSMITTAL

From:

To

The Registrar

Central Institute of Technology Kokrajhar

Subject: Submission of bids for the work of "Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar".

Sir,

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

- 1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
- 2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. I/we submit the requisite certified solvency certificate and authorize the CIT Kokrajhar to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/we also authorize CIT Kokrajhar to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Name of Work	Certificate from

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

Enclosures: Seal of bidder Date of submission:

Signature(s) of Bidder(s)

FINANCIAL INFORMATION (FORM 'A')

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

Financial	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016
Years					

- (i) Gross Annual Turn Over on construction works.
- (ii) Profit/Loss.
- II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal

Signature of Bidder(s)

FORM "B" BANKERS' CERTIFICATE FROM A SCHEDULED BANK

This i	s to	certify	that	to	the	best	of	our	knowled	dge	and	infor	mation	that	M/s./
Sh											. ha	ving	margii	nally	noted
addres	s, as	a Custo	mer	of o	our l	oank	are/i	s res	spectable	e an	d car	ı be t	reated	as go	od for
any	eı	ngagem	ent		upto	О	a		limit	(of	R	s		
(Rupe	es									.)					

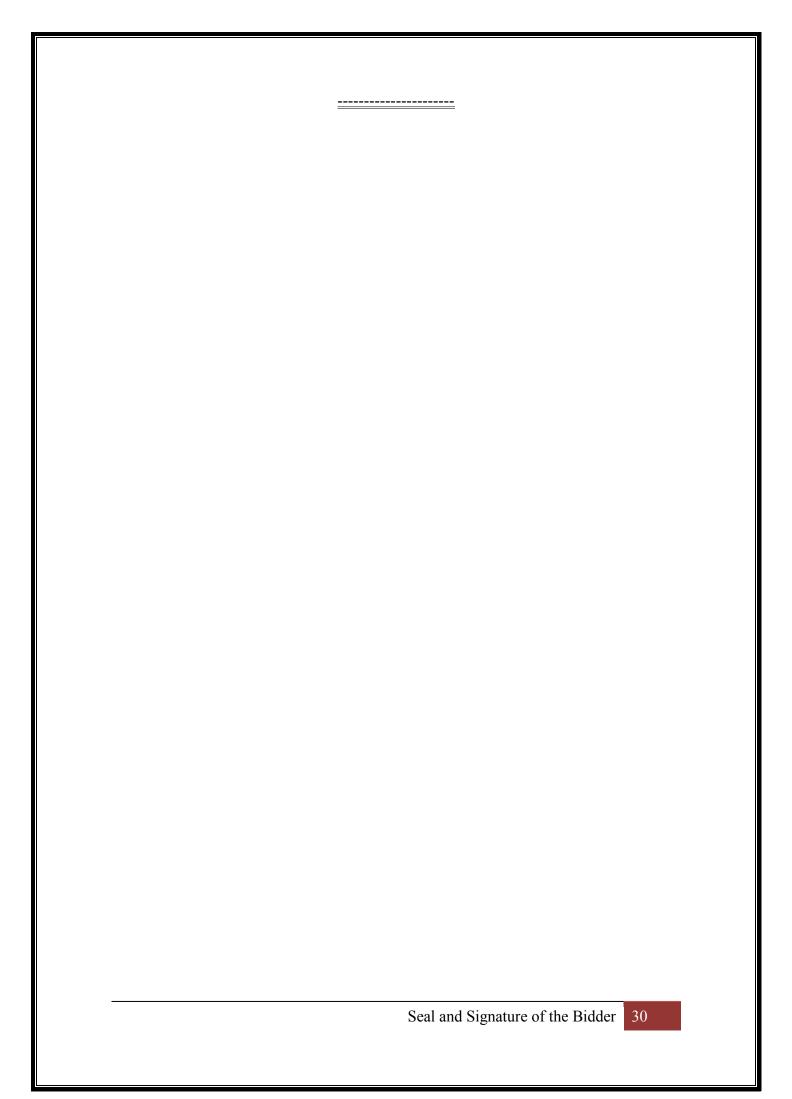
This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the

Bank

NOTE

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



FORM 'C'

<u>DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS</u> <u>DAY OF LAST DAY OF SUBMISSION OF TENDERS</u>

S.No	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commencemen t as per contract	Stipulated date of completio n	Actual date of completio n	Litigation/ arbitration cases pending/ in progress with details*	Name and address/ telephone number of officer to whom reference may be made	Whether the work was done on back to back basis Yes/ No
1	2	3	4	5	6	7	8	9	10

^{*} Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Bidder(s)

Note:

- (a) Attach Photocopies of Purchase Orders and Completion Certificates.
- (b) Attach Photocopies of Certificate of Satisfactory Performance Issued by Concerned Agency/Organization
- (c) Separate sheet may be used for giving detailed information in seriatim duly signed. This bid proforma must be submitted duly signed in case separate sheet is submitted.

FORM 'D' PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "C"

1. Name of work/project & location	
2. Agreement no.	
3. Estimated cost	
4. Tendered cost	
5. Date of start	
6. Date of completion	
(i) Stipulated date of completion	
(ii) Actual date of completion	
7. Amount of compensation levied for delay	yed completion, if any
(a) Whether case of levy of compensation for	for delay has been decided or not Yes/No
(b) If decided, amount of compensation levi	ied for delayed completion, if any
8. Amount of reduced rate items, if any	
9. Performance Report	
(1) Quality of work	Outstanding/Very Good/Good/Poor
(2) Financial soundness	Outstanding/Very Good/Good/Poor
(3) Technical Proficiency	Outstanding/Very Good/Good/Poor
(4) Resourcefulness	Outstanding/Very Good/Good/Poor
(5) General Behaviour	Outstanding/Very Good/Good/Poor
Dated:	Signature of the Owner/Client
<u></u>	

FORM "E" STRUCTURE & ORGANISATION

1. Name & address of the bidder			
2. Telephone no./Telex no./Fax no.			
3. Legal status of the bidder (Scan & upload copies of original document defining the legal status)			
(a) An Individual(b) A proprietary firm(c) A firm in partnership(d) A limited Company or Corporation			
4. Particulars of registration with various Government Bodies (Scan & upload attested photocopy)			
Organisation/Place of registration 1. 2. 3.			
5. Names and titles of Directors & Officers with designation to be concerned with this work.			
6. Designation of individuals authorized to act for the organization			
7. Has the bidder, or any constituent partner in case of partnership firm, limited company / Joint Venture, ever been convicted by the court of Law? If so, give details			
8. In which field of Civil Engineering construction the bidder has specialization and interest?			
9. List of Plant & Machineries with make, rating, year of manufacturer.			
10. Any other information considered necessary but not included above.			
Signature of Bidder(s)			
<u></u>			

SCHEDULE 'A'

Schedule of materials to be issued to the contractor:

S. No.	Description of item	Quantity	Rates (Rs.)	Amount (Rs.)
1	2	3	4	5
4		NIL		

SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

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

SCHEDULE 'C'

Tools and plants to be hired to the contractor:

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

SCHEDULE 'D'

EXTRA SCHEDULE FOR SPECIFIC REQUIREMENTS FOR THE WORK

1. **GENERAL**:

The Following special conditions shall be read in conjunction with General Condition of Contract and amendments/corrections thereto. If there are any provisions in these Special Conditions, which are at variance with provisions in the above-mentioned documents the provisions in these Special Conditions, shall take precedence.

(A) CIVIL WORKS:-

- (i) The work in general shall be carried out as per CPWD specifications 2019 Volume I to II, New Delhi with up to date correction slips unless otherwise specified in the nomenclature of the individual item or in the particular specifications of CIT Kokrajhar.
- (ii) For item not covered under CPWD Specifications 2019 Volume I & II, and nomenclature of individual items or in the particular specifications of CIT Kokrajhar, the work shall be done as per latest relevant BIS / IRC Codes of Practice and Technical Specification given in the Contract Agreement.
- (iii) Should there be any difference in description of the item in the provision of the said specification of item of work and the description of item given in the schedule of quantities the scope of the item shall be taken according to the following order of preference.
- a. Nomenclature of item as given in the schedule of quantities.
- b. Drawing/Sketch, if any referred in the nomenclature of items.
- c. Particular specifications/ Technical Specifications.
- d. CPWD specifications.
- e. Relevant BIS/IRC Code of practice (latest revision)/ASTM Standards.
- f. General drawings.
- g. Sound engineering practice as directed by the Engineer-in Charge whose decision in this regard shall be final and binding on the contractor.

2. INSPECTION OF SITE:

For the purpose of inspection of site and relevant documents the contractor is required to contact the concerned Assistant Engineer/Junior Engineer who shall give reasonable facilities for inspection of the same. The contractor shall be deemed to have satisfied himself as to the nature of the site of work. Local facilities of access, availability of materials and all other matters affecting his prices for the execution and completion of work. He is required to make himself fully acquainted with the nature and scope of work.

3. ADMISSION TO SITE:

Site of the work is available. The contractor shall deploy adequate security for the construction site at his own cost, round the clock.

4. SUFFICIENCY OF TENDER:

- a. Particulars and data furnished in the various sections of the tender documents need not be taken as complete by themselves. They are intended to serve as rough guidance only for the contractors to quote for the item rate tender. The tenderer shall, therefore, in their own interest examine the drawings, conditions of contract and specifications of work furnished in the tender documents. They shall also inspect the site and satisfy themselves on their own as to the hydrological, climatic and physical conditions prevailing at site, the nature, extent and practicability of works, all existing and required roads and other means of communications and access to site, royalties and ferry charges, if any, for labour and for probable site for labour camps, stores and godown etc.
- b. They shall also obtain for themselves all necessary information as to risks, contingencies and other circumstances which may affect or influence their tender. No extra charges consequent on any insufficient appreciation or otherwise shall be allowed. The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works/items, quantities or in bills of quantities which rates and price 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 work
- c. Should there be any discrepancy in or any doubt or obscurity as to the meaning of any of the tender documents, clarification should be sought for in writing sufficiently in advance of the last date fixed for the receipt of the tender from the concerned Assistant Engineer/ Junior Engineer. The department will have a right to make any amendments in the tender documents and any such changes will be intimated to the tenderer at least three days before the date fixed for receipt of tender.

5. CONTRACTOR'S REPRESENTATIVES, AGENTS AND WORKMEN/ WORK WOMEN:

- a. The contractor shall employ only Indian Nationals and verify their antecedents and loyalty before employing them on the work. He shall ensure that no person of doubtful antecedents and nationality is in any way associated with the work.
- b. The contractor shall, on request from the Engineer-in-Charge promptly cease to employ in connection with the contract and replace any person whose continued employment in connection there with is, in the opinion of the Engineer-in-charge, undesirable. He shall not be re-employed in connection with the contract without the written permission of the Engineer-in-charge. The decision of the Engineer-in-Charge upon any matter arising under these conditions shall be final and conclusive.

6. STORES, MATERIALS AND PLANTS & EQUIPMENTS:

a. All the stores and materials except the materials stipulated for issue by the Institute, required for the satisfactory completion of the work, shall be

- arranged by the contractor from his own sources/open market. No claim whatsoever shall be entertained by the Institute on account of delay in either providing these materials or non-availability of these materials in the market.
- b. The contractor shall, upon demand forward for the Engineer-in-charge's inspection, test certificates rendered by the suppliers for all materials furnished by the contractor.
- c. All materials brought on the site of work and meant to be used in the same, shall be the best of their respective kind and to the approval of the Engineer-in-charge. The Engineer-in-charge or his representative will accept that the materials are really the best of their kinds, when it is proved beyond doubt that no better materials so the particular kind in question are available in the market.
- d. The contractor shall obtain the approval of the Engineer-in-charge, of samples of all materials to be used in the work and shall deposit these samples with him before placing an order for the materials samples. Fresh samples shall be deposited with the Engineer-in-charge whenever the type of source of any materials changes.
- e. The Engineer-in-charge shall have power to cause the contractor to purchase and use such materials from any particular source, as may, in his opinion, be necessary for the proper execution of the work.
- f. The Copy of invoice for purchase of cement and steel shall be submitted to the Engineer-in-charge for every lot of cement / steel brought at site along with manufacturer's test certificate.

7. CONSUMPTION OF CEMENT:

Proper record of daily consumption of cement shall be maintained at the site of work for each item as directed by the Engineer-in-Charge. Separate Cement Consumption register shall be maintained for the RMC if permitted from the outside sources, based on the cement consumption certificate given by the Plant.

8. SITE OFFICE, VEHICLES AND OTHER PLANTS & EQUIPMENTS:

- a. Contractor has to arrange required T&P and machinery for execution of work. License fee of land to be used for Concrete Batching Plant, Contractor's site office, Labour huts etc. by the contractor shall be charged as per CITK approved rates @ Rs. 500/- per sqm per annum with annual compounded escalation of 7.5 % effective after one year from the date of start of work and security deposit @ Rs 500/- per sqm in cash or in the form of bank guarantee shall be submitted by the contractor.
- b. The equipment required for execution of work should be positioned as per instructions of Engineer-in-charge. No rent or security deposit of land shall be charged for stacking of material/ movable machinery required for execution of work in available land in consultation with Engineer-in-charge.
- c. The contractor shall also arrange to provide and maintain required office furniture and office equipments for engineering staff of CITK, if requested. The computer operator fully conversant with MS office suite, AutoCad and an office attendant shall be engaged to the satisfaction of the

- Engineer-in-charge. The running and maintenance of computers till the completion of the work shall be responsibility of the contractor.
- d. The contractor shall provide suitable vehicle for site visits, for taking samples from work/ plant site to laboratory and movement of the officials for checking/ controlling the quality of the work or other official works. The movement of the vehicle shall be controlled by Engineer-in-Charge. The running and maintenance of vehicles till the completion of work shall be responsibility of the contractor.
- e. All consumables including diesel/ petrol/ fuel/ lubricants/ stationary and computer consumables shall be provided by the contractor at his own cost and nothing shall be paid on account of the above infrastructure/ facilities to be provided by the contractor.
- f. In the event of vehicles being off the road for maintenance or on account of breakdown the contractor will provide suitable substitute vehicle immediately, failing which an amount of Rs. 2500/- per day per vehicle shall be debited to the contractor's account.
- g. In the event of failure to provide proper substitute/ replacement of the computer and/or operator on account of maintenance/ breakdown/ non-reporting on duty by computer operator, Rs 750/- per day per computer / operator, and Rs. 500/- per day for office attendant shall be debited to the contractor's account.
- h. The contractor shall provide at his own cost site office an area of 100 sqm including toilet block with decent finish a suitable for an engineering at location decided by Engineer-in-Charge for CITK's Officials. Office should be provided with all necessary furniture. In addition to this, one Toilet Block (Gents with 2 Wash basins, 2 EWC & 2 Urinals) & (Ladies 1 Wash basins, 1 EWC) with all necessary plumbing & sanitary fittings. Site office shall be provided with necessary electric lights, 4 Split A.Cs (1.5 ton capacity each), one drinking water cooler, and other facilities which are generally required for a site office. Un-interrupted Electricity supply has to be arranged by the contractor, Electricity bill shall be paid by the contractor.
- i. The contractor shall be allowed to take away the vehicle only after completion of the work and release of final bill, with prior approval of the Engineer-in-charge.
- j. Nothing extra shall be paid on account of above provisions.

9. STACKING OF MATERIALS:

The contractor shall stack materials at the area allotted at site of work strictly as per instructions of the Engineer-in-Charge. This storage site/yard need necessarily be in the perimeter/ proximity of the work site and nothing extra shall be paid on this account.

- a. CITK reserves full right to get the land vacated without any notice if the site is required by CITK anytime during the period of allotment.
- b. The contractor will vacate the area immediately on expiry of license/completion of work, whichever is earlier and handover vacant possession of the area to CITK.
- c. The final bills of the contract will not be settled unless the area is vacated and handed over to CITK in vacant possession on completion of work.

- d. The contractor will ensure that no unauthorized construction comes within the area allotted.
- e. The allotment will be only for the existing contract with CITK and will not be extended for any further period for the contract.
- f. A proper agreement would be got executed with the contractor for stacking construction materials and labour huts for a specific period.
- g. Land shall be allotted with clear understanding that CITK reserves the right to get the land vacated without any notice if site is required by CITK any time during the period of allotment.
- h. No rent or security deposit of land shall be charged for stacking of material/ movable machinery required for execution of work in available land in consultation with Engineer-in-charge.

10. CO-ORDINATION:

The contractor shall co-operate with Institute's other contractors, compare plans, specifications and the time schedules and so arrange his work that there will be no interference. The contractor shall forward to the Engineer-in-charge all correspondence and drawings so exchanged. Failure to check plans and conditions will render the contractor responsible for bearing of any subsequent change found necessary.

11. LAND FOR LABOUR CAMPS:

No labour camp shall normally be permitted on the CITK land without prior approval of Engineer-in-Charge. On receipt of the written request from the contractor, the use of land for the labour camp may however be allowed by the Engineer-in-Charge in consultation with the Registrar (CITK) duly marked and delineated on a plan. The land required for labour huts need not necessarily be in the proximity of the construction site and nothing extra shall be paid on this account. This land shall be fenced by the contractor at his own cost. Before handing over the possession of land to the contractor a security deposit of Rs. 500/- per sqm either in cash or in form of Bank guarantee shall be submitted by the contractor for this purpose. The provision of this facility is absolutely temporary till the completion of work and will not be continued, in any manner whatsoever as having transferred the possession of land to the contractor or any person or labour of the contractor. It is further agreed between the parties that the land shall always be available to CITK during this period at the absolute discretion of the Engineer-in-Charge. On completion of the project, the huts, installations and offices etc, shall be removed by the contractor and vacant possession of land shall be handed over to the Engineer-in-Charge. If the contractor does not vacate the land within one month after completion of work, the Engineer-in-Charge shall forfeit the bank guarantee / cash deposited as security by the contractor and take the action for vacation of such land. If any construction be found outside the area earmarked, this shall be treated as unauthorized construction. The license fee for the land shall be charged @ Rs. 500/- per sqm per annum (with annual compounded escalation of 7.5 % effective after one year from the date of start of work).

12. POWER SUPPLY:

Generally, no power supply will be provided by CITK at site. The Contractor will make his own arrangement for his requirement of power to carry out the

work or has to make his own arrangement for Generators sets for running his machineries etc. However, the Institute may provide electricity on the request of the contractor, depending upon the availability of spare power, on payment basis under the terms and conditions fixed by the institute. All the works by the Contractor in this regard will be done as per the Indian Electricity Act and rules framed there under and as approved by the Engineer-in-Charge. Nothing extra will be paid on this account.

13. STANDARD OF WORKMANSHIP:

To determine the acceptable standard of workmanship, the contractor shall execute a portion of the items of works as a sample for approval of the Engineer-in-Charge before taking up the actual execution of the particulars item of work. These samples on approval of the Engineer-in-Charge shall be guiding samples for execution of the particulars item of work. Work not conforming to approved samples shall be rejected. The cost of samples is to be borne by the contractor.

14. PROGRAMME OF CONSTRUCTION OF WORKS, PROGRESS REPORT AND PERFORMANCE:

(i) GANTT CHART AND PERT CHART:-

The contractor shall submit within **fifteen days** from date of acceptance of the letter, Bar / Gantt chart in MS Project format. The same shall be got approved from the Engineer-in-Charge before starting of the works and shall be binding on the contractor. In case of non-submission of the Bar / Gantt and PERT Chart by the contractor within fifteen days as stated above, CITK shall get it done from any consultants at the risk and cost of the contractor and the programme / Bar / Gantt chart and PERT Chart so prepared shall be binding on the contractor. A recovery of Rs. 25,000/-will be effected for non-submission of detailed Bar / Gantt chart and PERT Chart indicating methodology & Sequence of activities.

The contractor shall also submit a monthly progress report of the activities, along with site photographs indicating work progress, with reference to the approved Bar / Gantt chart and PERT Chart by 7th of every month, failing which compensation of Rs. 5,000/- per report shall be levied on the contractor. The decision of the Engineer-in-Charge shall be final and binding in this regard on the contractor, without prejudice to the rights of the Authority under the Agreement. Based on the evaluation by the Engineer-in-Charge and / or his representative of the progress reports submitted, the contractor shall take necessary corrective measures to adhere to the programme, to achieve the required progress and timely completion. In case the contractor fails to take corrective measures, he shall make himself liable for action under clause 2 and /or clause 3 of the contract.

(ii) PERFORMANCE:-

a. The contractor shall perform all works in substantial and acceptable manner in accordance with the plans and specification and in accordance with such further explanatory drawings, details and instructions as may from time to time be given by the Engineer-in-Charge. The work must be proceeded within such sections and such times as directed by the Engineer-in-Charge

- b. The contractor shall provide and do everything necessary for the proper execution of the works according to the true intent and meaning of the drawing and specification taken together, the same may or may not be particularly shown on the drawing, provided that the same can be reasonably inferred there from. Figured dimensions to be followed in preference to scale dimensions and all particulars to be taken from the actual work.
- c. It must be clearly understood that the whole of the conditions are intended to be strictly enforced and that no extra charges in respect of extra work will be allowed unless they are clearly outside the spirit and meaning of the conditions or unless such works shall have been ordered in writing by the Engineer-in-Charge.

(iii) PROGRAMME OF CONSTRUCTION:-

- a. Time is the essence of the contract and it shall be clearly understood that the tenderer has a definite programme to carry out the work within the time limit set. The time of completion stipulated in the contract covers the rainy season and no extension of time on account of dislocation due to rains during the above-mentioned period will be granted.
- b. The contractor shall prepare time and progress schedule in the form of Bar / Gantt Chart and PERT Chart based on Networks / CPM analysis including resources scheduling for the whole of the contract within fifteen days after receipt of the work order for completing the work within the completion time stated in the contract and submit them for approval of the Engineer-in-Charge.
- c. Immediately after the conclusion of the agreement and before the work is started, the contractor shall furnish in writing for approval, to the Engineer-in- Charge a programme of his proposed general and detailed arrangement for carrying out the works and of the time, order and manner in which it is proposed to execute the various sections of the work.

(iv) PROGRESS OF WORKS:-

- a. Contractor shall give the Engineer-in-Charge a monthly or other periodical progress reports of the work done during that period.
- b. It shall be ensured that the works are carried out according to the agreed programme and no changes are made except with the prior approval or at the instance of the Engineer-in-Charge.
- c. The progress of work will be reviewed periodically by the Engineer-in-Charge with the contractor and shortfalls, if any, shall be sorted out. The contractor shall thereupon take such actions as may be necessary to bring back his work to schedule without additional cost to the department either by employing overtime operation, increasing the number of shifts/labour & resources, capacity of equipment or as otherwise directed by the Engineer-in-Charge.
- d. Should the work be suspended by reason of rain, strike, lockouts or other cause, the contractor shall take all precautions necessary for

the protection of the work at his own expenses shall make good any damage arising from any of these causes.

15. BYE – LAWS:

The contractor shall comply with all bye-laws and regulations of local and statutory authorities having jurisdiction over the works and shall be responsible for payment of all fees and other charges and the giving and receiving of all necessary notice and keeping the Engineer-in-Charge informed of the said compliance with the bye-laws, payment made, notices issued and received. The contractor shall indemnify the AUTHORITY against all claims in respect of patent, design, trademarks of name or other protected rights in respect of any plant, machine work or material used for or in connection with the work or temporary works and from and against all claims, demands, proceedings, cost, charges, and expenses whatever in respect of or in relation thereto. The contractor shall defend all actions arising from such claims and shall himself pay all royalties, license fees, damages, cost and other charges of all and every sort that may be legally incurred in respect thereof. Environmental and other clearances required shall be obtained by the contractor at his own cost for installation of plants and machinery and other equipment's.

16. SITE PRECAUTIONS:

- (i) Any materials or T&P etc. found lying outside the site(s) approved by Engineer-in-Charge shall be got removed at once by the Engineer-in-Charge at the risk and cost of the contractor.
- (ii) With regard to construction safety measures, the contractor shall adhere to Indian Standard codes of practice for safety and health, requirements of provincial Government and local Municipal authorities wherever the provisions of the latter two agencies shall be more stringent than the provisions of the former. When these codes do not exist, the contractor shall adhere to such safety measures as directed by the Engineer-in-charge.
- (iii) The contractor shall during construction provide barricades at his own cost as per specifications prescribed by the Engineer-in-charge to segregate the working area to ensure safety of all concerned. Nothing extra shall be paid on this account.
- (iv) The contractor shall be responsible for any damage, resulting from his operations, to fixtures such as underground cables/wires, contact lights, hard surface areas, water mains, sewage line, other operational installations etc. The contractor shall restore, replace or repair any such damage to the complete satisfaction of the Engineer-in-charge. The Engineer-in-charge will stake out or inform the contractor as to the location of such underground cables, pipes, ducts, etc. and in this regard, the Engineer-in-charge should be advised in sufficient time ahead as to what areas the contractor may be operating on.
- (v) If at any time there is hindrance in the execution of the work due to any reason whatsoever, the Authority shall not be responsible and shall not entertain any claim whatsoever on any account from the contractor.
- (vi) If on handing over site or at any time thereafter during the execution of the works the contractor considers that any drawing or information

- necessary for the execution of the work has not been provided he has to inform the Engineer-in-charge in writing giving details.
- (vii) If any time during the execution of work and for any reasons whatsoever there is some difficulty in availability of site, the contractor shall adjust his labour accordingly and no claim shall be entertained on this account.
- (viii) Contractor shall be responsible for the police and antecedent verification of the labour employed by him in the operational area and shall indemnify the department of any security problems arising thereof.

17. CONTRACT DOCUMENT:

The agreement shall be executed on a non-judicial stamp paper of value of Rs. 100/- (One Hundred Only) and the cost of the stamp paper shall be borne by the contractor.

18. DAMAGE / DEFECTS LIABILITY:

If the contractor or his working people or labours shall break, deface, injure or destroy any part of building which they may be working on any building road, road Kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post, or wires, trees, grass or grassland, cultivated ground or any pavement contiguous to the premises on which the work of any part of it is being executed or if any damage shall happen to the work while in progress from any cause whatsoever, the contractor shall upon a receipt of a notice in writing in their behalf make the same good at his own expense or in default the Engineer-incharge may cause the same to be made good by the other workmen and deduct the expense from any sums that may be then or at any time thereafter may become due to the contractor or from his security deposit.

The defects liability period shall be one year from the date of completion of work for civil works component. It shall be liability of the contractor to repair, strengthen or reconstruct at his own expense any portion of the work which has shown damages or any defect arising out of any bad workmanship or defective material being used for the work. In the case of rectification not being commenced by the contractor within 7 days from the date of notice from the Engineer-in-charge, the Engineer-in-charge reserves the right to get the repair work executed at the risk and cost of the contractor. Rectification work(s) shall be completed within reasonable time as per satisfaction of Engineer-in-charge.

The security deposit of the contractor shall not be refunded before the expiry of one year after the issue of the certificate of the completion of work or till the final bill has been prepared and passed, whichever is later.

The contractor shall not be entitled for any payment whatsoever on account of above special conditions of contract. For Air-conditioning and ventilation works the defects liability period of one year will commence from the date of successful completion and second seasonal test (Peak summer and peak monsoon), whichever is later.

19. The Contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit board, red lights and providing barriers. He shall provide safety helmets to all workers, Engineers and visitors. He shall be responsible for all damages and accidents caused due to negligence on his part. No, hindrances shall be caused to traffic during execution of work.

- 20. The Contractor shall at his own expense, provide all materials required for the works other than those which are to be supplied by CITK. The contractor shall deposit royalty and obtain necessary permit for collection of stone, sand, red bajri, aggregate, earth etc. from the local authority in the matter and will abide by the notification issued by Central Govt. / State Government / Local State Authorities as applicable from time to time in this regard. The contractor is also bound to allow deduction from his bills any difference in statutory taxes / royalty and penalty proposed by Local State Authorities to CITK till finalization of settlement of all demands in this regard by Central / State Govt.
- **21.** For items pertaining to building work the specification detailed under relevant subheads for building work shall be followed.
- 22. All incidental charges of any kind whatsoever including cartage, storage, cutting and wastage etc. shall be borne exclusively by the contractor and nothing extra shall be payable to him on this account.
- **23.** All material obtained from CITK stores or otherwise shall be got checked by the Engineer-in-Charge of the work on receipt of the same at site before use.
- 24. No payment will be made to the contractor for damage caused by rain or other natural calamities during the execution of the work and no such claim on this account will be entertained.
- 25. The rate for all items shall unless and until clearly specified otherwise include cost of all the components of labour, material and other input involved on the execution of the item.
- **26.** The contractor shall adjust his labour, staff, plant machinery etc. according to the requirement of work from time to time and no claim shall be entertained on account of idle labour, plant, machinery etc. due to any reason whatsoever.

27. RCC WORKS:

The centering and shuttering for all CC / RCC works shall be of steel, ply or aluminium of approved thickness and quality. The design of centering and shuttering for the work shall be got approved from the Engineer-in-charge before starting the work.

28. Timber required or all wood- work shall be well seasoned so that the moisture content does not exceed the limits laid down in I.S. 287 (I.S. Recommendations for maximum permissible moisture content for timber used for different purposes).

29. TESTS:

The various tests as indicated in the CPWD specifications or BIS and particular/ Technical specification, as considered necessary by the Engineer-in-Charge shall be carried out in the laboratory as approved by the Engineer-in-Charge. The contractor shall bear the entire cost of samples, testing charges, carriage and any other incidental expenditure incurred, thereon. The result shall be final and binding on the contractor.

30. For the civil works the work shall in general conform to the CPWD specification 2019 Vol. I & II with correction slips issued up to date. Should there be any different in the provision of the said specifications for separate item of work and the description of the item given in the schedule of quantities, the latter shall prevail and for electrical works latest CPWD specifications with up to date amendments and other related specifications or any other printed

- publication on general specifications referred to elsewhere in the contract with up-to-date correction slips shall be followed.
- **31.** All the materials to be used on the work shall be of best quality available and shall have the approval of Engineer-in-Charge before use.
- 32. The contractor shall arrange to provide portable lights and markings with the luminous paint to indicate the areas under construction/or repairs as per the direction of Engineer-in-Charge. These lights shall be of the approved colour and capacity and shall be operated throughout the night and during bad weather. In addition to these markings, lights cone markers painted with luminous paints shall also be put.
- **33.** The contractor will remove the labour huts on completion of the work. The payment of final bill will be subject to the compliance of this condition by the contractor.
- **34.** The contractor shall provide suitable temporary diversion arrangement for flow of water in the existing drain pumping and bailing out water from the drain, if required for proper execution of the works at his own cost, as per directions of Engineer-in-Charge.
- **35.** In all contracts relating to security, watch and ward services, the contractor shall engage ex-servicemen or ex-police personnel to the contracted job.
- **36.** The contractor shall make necessary arrangement for all machinery, equipment etc. considered necessary by the Engineer-in-Charge for completion of works within the stipulated time. The rates quoted by the contractor shall include the cost of providing / running all such machinery, equipment etc. Nothing extra shall be paid on this account.
- 37. The contractor shall regulate the movement of vehicles in accordance with the regulations of local traffic authority and shall provide necessary roads, diversions etc. for access of vehicles to the site of work. Nothing extra over and above quoted by him shall be paid on this account.
- 38. Should there be any discrepancy in or any doubt or obscurity as to the meaning of any of the tender documents, clarification should be sought for in writing sufficiently in advance of the last date fixed for the receipt of the tender from the concerned Assistant Engineer / Junior Engineer of Engineering Cell. The department will have a right to make any amendments in the tender documents and any such changes will be intimated to the tenderer at least three days before the date fixed for receipt of tender.

39. SCOPE OF THE WORKS:

A. INTENT OF THE PLANS AND SPECIFICATION:-

The cross- sectional drawings, if any, together with the contract specification, are intended to show and explain the manner of executing the work and to indicate the type and class of materials to be used. The work to be carried out

under the contract shall, except as otherwise provided in these conditions, include all labour, material, tools, plant, equipment and transport that may be required in preparation of and for and in the full and entire execution and completion of the works and maintenance of the same during the construction and observation period. The description given in the schedule of works shall, unless otherwise stated, be held to include waste material, carriage and cartage, carrying or hoisting setting and fixing in position and all other labour necessary and for the full and entire execution with good practice and recognized principle and any urgent and temporary works, fully contingent on the work.

B. EXCAVATION:-

While carrying out the excavation work over the areas or in the foundation trenches, the contractor shall carry out the excavation work very carefully assuming that there may be certain power / communication cables and other services like storm water drain, water supply line, chilled water pipe line and fire fighting line and manholes etc. In case of any damage to the services while carrying out the work, the contractor has to make good the same at his own expenses. Before any excavation work is started with the help of heavy machinery, the contractor shall cut / open the trench of size approximately 1.00 m Wide x 1.00 m deep as per direction of Engineer-in-Charge to find out the underground services, if any, then excavate further along the alignment of such services and then only switch over to the excavation with the help of heavy machinery. Nothing extra shall be paid for the same.

40. TEMPORARY SERVICE ROADS, PREPARATION OF GROUND ETC.:

- a. The contractor shall bear all expenses and charges, on special or temporary service roads required by him in connection with access to the site. He shall not object to the use of service roads by other construction traffic.
- b. Upon completion of the work such roads shall be broken up and leveled where so required by the drawings unless the Engineer-in-Charge shall otherwise direct.
- c. Conveyance of men and materials and inspection staff etc. to any portion of the work site involved in the construction shall be the responsibility of the contractor.

41. CO-OPERATION BY CONTRACTORS:

The contractor shall give the work his constant attention to facilitate the progress thereof and shall co-operate with the department in every way possible. He shall have to be present on the work at all times. During his absence, a competent representative who can speak the local language and English and could be able to communicate with the department's representative in Hindi and is authorized to receive order and act for him should be present.

42. INSTRUCTIONS AND NOTICES:

a. Subject as otherwise provided in this contract all notices to be given on behalf of the department and all other actions to be taken on its behalf may be given or taken by the Engineer-in-Charge or any officer, for the time being entrusted with the functions, duties and powers of the Engineer-in-Charge.

- b. All instructions, notices and communication, etc. under the contract shall be given in writing and if sent by registered post to the last known place of above or the business of the contractor, shall be deemed to have been served on the date on which in the ordinary course of post, these would have been delivered to him.
- c. Contractor or his agents shall be in attendance at the site(s) during all working hours and shall superintend the execution of the works with such additional assistance in each trade as the Engineer-in- Charge may consider necessary and orders given to the contractors agent shall be considered to have the same force as if they had been given to the contractor himself.
- d. The Engineer-in-Charge shall communicate or confirm his instructions to the contractor in respect of the execution of work in a "Works Site Order Book" maintained at the office of the Engineer-in-Charge and the contractor or his authorized representative shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the contractor, he shall be furnished certified true copy of such orders.

43. PLANS & SPECIFICATIONS:

- a. One copy of the preliminary plans, GFC drawings as specified in each packages & specifications (excluding CPWD Specifications with up to date correction) shall be furnished to the contractor at the commencement of the work. Such copies and copies of supplementary details furnished by the Engineer-in-Charge shall be kept at the site of work until completion and the Engineer-in- Charge shall at all times have access to them.
- b. The contractor shall submit to Engineer-in-Charge for approval such additional plan or working drawings of structure as may be required. The contract rates shall include the cost of furnishing such drawings.

44. WATCH AND WARD & LIGHTING:

The contractor shall provide and maintain at his own expense all lights, fencing and watch & ward when and where necessary or required by the Engineer-in-Charge for the protection of the work or for safety and convenience of those employed on the work or the public.

45. DEPARTMENTAL REPRESENTATION:

The Engineer-in-Charge during his absence on the works shall be represented by one of his subordinates, whose duties in relation to the contractor shall be to ensure that work is performed in conformity with the plans and specifications in all respects. He shall communicate to the contractor the instructions and directions of the Engineer-in-Charge on all questions relating to the work, and the contractor shall comply with such instructions and directions. He shall request the contractor in writing to suspend the performance of any part of the work, if in his judgment the contractor is deviating from the plans and specifications, in spite of his instructions, and contractor shall comply.

46. SITE CONDITIONS, REQUIREMENTS & SOURCES OF MATERIALS BENCH MARKS AND SETTING OUT OF WORKS:

a. The levels of the various floors of building and pavements, road work etc. shall be as shown In the architectural level plans, Should there be any

- discrepancy in the floor/ground levels, the decision of the Engineer-in-Charge shall be final and binding and no claim whatsoever shall be entertained on this account.
- b. The contractor shall be responsible for the true and proper setting out of the work and for the correctness of the positions levels and dimensions and alignments of all parts of the works and for the provisions of all necessary applications and labour in connections therewith at no extra cost.
- c. If any time during the progress of the work any error may appear or arise in the position, levels, dimensions or alignments of any part of the work, the contractor on being required to do so by the Engineer- in-Charge shall at his own expense, rectify such errors to the satisfaction of the Engineer-in-Charge.
- d. The checking or any setting out of any line or level by the Engineer-in-Charge or his representative shall not relieve in any way the contractor of his responsibility for the correctness thereof and he shall carefully protect and preserve all Bench marks, site rails, pegs and other things used in the setting out of works.
- e. Completion of all items of the work in question-shall be carried out by the contractor at his own cost.
- f. The Temporary Bench mark of columns, piers, foundations etc. shall be established by high precision Theodolite / Total Station and the centre line marks shall be engraved on the metallic surface embedded in smoothly finished and properly anchored concrete pillars of such dimension and constructed at such intervals and places as may be directed by the Engineer-in-Charge with prior approval of the Engineer-in-Charge and shall be maintained in proper manner throughout the period of construction and till the final measurements of the work are completed at his own cost.
- g. The contractor shall also keep proper record of such permanent Benchmarks established denoting therein their correct levels.
- h. The work of establishing all such bench marks shall be carried out only by experienced staff of the contractor with the help of precision instruments suitable for this type of work. The instruments used shall be checked for their accuracy and for permanent adjustment before the commencement of the work and also at frequent intervals during the progress of the work.
- i. All such Bench marks established by the contractor shall be subject to check and approval of the Engineer-in-Charge or his representative and any variations noticed in the work as a result of improper establishment or maintenance of such Bench marks shall be at the contractor's risk and expense. The contractor has to adjust his work and progress the work in co-ordination with other agencies working at site.

47. SAMPLING AND TESTING:

a. The contractor shall provide proper facilities at all times for the inspection and testing of materials and the Engineer-in-Charge shall have access at all times to the place of stores or manufacture. The contractor shall give sufficient advance notice of placing order so as to permit test to be completed before the material is incorporated in the work and shall afford such facilities as the Engineer-in-Charge may require for collection and

- forwarding samples and making inspection. The contractor shall not make use of or incorporate in the work the materials represented by the samples, until tests have been made and materials found to be in accordance with the specifications.
- b. All tests of materials furnished by the contractor shall be made in accordance with commonly recognized methods of Indian or of other international organization or such other method and test as are prescribed in the specification or are in use in conformity with standard practice of the department and charges therefore, will be borne by the contractor.
- c. Field tests of materials will be carried out by the Engineer-in-Charge as deemed necessary and these tests shall be made in accordance with the standard practices of the department. The cost involved in all such field tests will be borne by the contractor.
- d. The various tests as indicated in the specifications or as considered necessary by the Engineer-in-Charge shall be carried out in the laboratory as approved by the Engineer-in-Charge. The contractor shall bear the entire cost of samples, testing charge, carriage and other incidental expenditure incurred thereof. The result shall be final and binding on the contractor.
- e. The contractor shall submit certified true copies of the vouchers for verification of actual purchase of any materials whenever directed by the Engineer-in-Charge.
- f. The contractor shall not be entitled for any extra payment whatsoever on account of the above special conditions of contract until and unless specified otherwise.
- g. Contractor shall distinctly display a board at work site for cement and steel reinforcement (dia-wise) indicating the opening balance on a particular day, receipt during the day and issue during the day and closing balance at the end of the day. (The entries shall be updated immediately on physical issues).

48. CONDITIONS FOR STORAGE OF MATERIAL:

The contractor shall bear all incidental charges for cartage / storage and safe custody of material. The contractor shall construct cement godown suitably at the place allotted by the Deptt. and as per directions of Engineer-in-Charge for storing the materials safe against damage by sun, rain, dampness, fire, theft etc. He shall also employee necessary watch & ward establishment for the purpose. Cement of different brands and grades in gunny or polythene bags shall be stored in separate godowns. Each godown shall be provided with a single door with **two locks**. The keys of one lock should remain with Assistant Engineer / Junior Engineer in-charge of the work and that of the other lock with the authorized agent of the contractor at the site of work so that the cement is removed from the godown according to the daily requirement with the knowledge of both the parties. The day-to-day receipt and account of cement shall be maintained by Assistant Engineer / Junior Engineer in-charge of the work and signed daily by the contractor or his authorized agent. Cement shall be stored and stacked in bags in dry and water proof sheds. The bag shall stack in rows of two and at least 10 to 20 cm clear above the floor with two layers of dry bricks laid on the well consolidated earth. A space of 60cm should be kept alround as well as between the exterior walls and the stacks. Cement bags

should be placed together in the stack to reduce circulation of air as much as possible. Cement bags shall not be stacked more than 10 bags high to avoid lumping under pressure. Contractor shall distinctly display a board at work site on the cement store indicating the opening balance on a particular day, receipt during the day and issue during the day and closing balance at the end of the day. (The entries shall be updated immediately on physical receipt and physical issues).

49. CONDITIONS FOR CEMENT (PROVIDED BY CONTRACTOR –NOT STIPULATED FOR DEPARTMENTAL ISSUE):

- a. The contractor shall procure cement confirming to B.I. Standards Codes, as required in the work from reputed manufactures of cement, having a production-capacity of one million tonne per annum or more, such as ACC, L&T, Ultratech, Ambuja, Shree cement, JK, Jaypee, Century, Star and Cement corporation of India etc. as approved by Ministry of Industry, Government of India, and holding license to use B.I.S. certification mark for their product, whose name shall be got approved from Engineer-in-Charge, Supply of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week of written order from the Engineer-in-Charge.
- b. The cement shall be brought at site in bulk supply as per the requirement to meet out the programme submitted by the firm and approved by the Engineer-in-Charge.
- c. The cement godown of the capacity to store a minimum of 1500 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with Engineer-in-Charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge and his authorized representative at any time.
- d. The contractor shall supply the sample of cement required for testing free of charges. The cost of tests including all incidental charges shall be borne by the contractor.
- e. The actual consumption of cement on works shall be regulated and proper accounts maintained. The theoretical consumption of cement shall be worked as per procedure prescribed in Clause 42 of the GCC and shall be governed by the conditions laid therein.
- f. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without permission of the Engineer-in-Charge.

50. CONDITION FOR STEEL (PROVIDED BY CONTRACTOR - NOT STIPULATED FOR DEPARTMENTAL ISSUE):

a. The Contractor shall procure steel reinforcement bars TMT bars having a production capacity of two million tonne per annum or above and conforming to relevant BIS codes from primary steel producers i.e.

TISCO, IISCO, SAIL, Jindal, JSW, RINL etc. as approved by the Ministry of Steel. The contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineer-in-Charge as per provision in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the Contractor at his cost within a week time from date of written orders from the Engineer-in-Charge.

- b. The steel reinforcement shall be brought to the site in bulk supply as per the requirement or program submitted by the firm and approved by Engineer-in-Charge.
- c. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate physical verification.
- d. For checking nominal, mass, tensile strength, bend test, re- bend test etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Size of bar	For consignment below	For consignment over 100		
	100 tonnes	tonnes		
Under 10 mm dia	One sample for each 25	One sample for each 40		
	Tonnes or part thereof	Tonnes or part thereof		
10 mm to 16 mm	One sample for each 35	One sample for each 45		
dia	Tones or part thereof	Tones or part thereof		
Over 16 mm dia	One sample for each 45	One sample for each 50		
	Tones or part thereof	Tones or part thereof		

- e. The Contractor shall supply the sample of steel required for testing free of charge. The cost of tests including all incidental charges shall be borne by the contractor.
- f. The actual consumption of steel on work shall be regulated and proper accounts maintained. The theoretical consumption of steel shall be worked out as per procedure prescribed in Clause 42 of the GCC and shall be governed by the conditions laid therein.
- g. Contractor shall distinctly display a board at work site indicating dia-wise quantity of raw steel available at site on a particular day, receipt during the day and issue during the day and closing balance at the end of the day. (The entries shall be updated immediately on physical receipt and physical issues).
- h. Steel brought to site and remaining unused after completion of work shall not be removed from site without written permission of Engineer-in-Charge.

51. INSPECTION OF MATERIAL AND TRAINING OF CITK OFFICIALS:

a. To ensure above, if desired by CITK, the contractor shall arrange factory inspection and testing of material as per ASTM Standards. In such a case, contractor shall also arrange for factory training on site handling, site storage of material and quality control measures to be adopted at site

- during laying/ installation of material. Nothing extra is payable to the contractor on account of this.
- b. The inspection shall be arranged in two batches of 3 Engineers each. The factory inspection and training shall cover each aspects as per BS/ASTM Standards and shall be for a maximum period of 5 days for each batch at the manufacturers' works. The travel, lodging, boarding expenses for such CITK Engineers shall be met by contractor. The actual programme shall be worked out mutually before deputing CITK Engineers.

52. USE OF READY MIX CONCRETE:

- a. Design mix is to be carried out as per IS 10262, IS 456 and other relevant IS codes / CPWD Specifications amended up to date.
- b. The agency shall install fully automatic Batch Mix Plant at site or in nearby area wherever permissible.
- c. In case of non-serviceability of batching plant or if required otherwise, contractor may be allowed to arrange concrete from RMC (Ready Mix Concrete) producing plants (located within 50 km distance from the site of work) with prior approval from Engineer-in-charge. Nothing extra whatsoever shall be payable on this account over & above the rates of design mix concrete.
- d. In such cases, the contractor shall, within 15 days of award of the work, submit the text of MOU proposed to be entered between purchaser (the contractor) and supplier (RMC producer) to the Engineer-in-Charge for his approval. The contractor shall draw the MOU with approved RMC producer and submit the copy to Engineer-in-Charge within a week of such approval. The contractor will not be allowed to use ready mixed-concrete without completion of above stated formalities.
- e. The contractor can use admixture to increase the workability of the concrete. However nothing shall be paid extra for using RMC, admixture, and lead etc., reason what so ever. The concrete shall be paid into the respective item as mentioned in the BOQ.
- f. The contractor is allowed to use 53 grade OPC cement in case of non-availability of 43 grade OPC cement. However nothing shall be paid extra to contractor on this account. Contractor is also allowed to use approved blended cement, but site blending is not allowed. Contractor is also allowed to use approved crushed sand in lieu of natural river sand for the concrete work.

53. Validity:

Tenders submitted shall remain valid for acceptance for a period of **120 days** from the date of opening of the tender. The tenderer shall not be entitled during the said period of 120 days, without the consent in writing of the Owner, to revoke; or cancel his tender or to vary the tender given or any term thereof. In case of tenderer revoking or cancelling his tender or varying any term in regard thereof without the consent of Owner in writing, the Owner shall forfeit earnest money paid by him along with tender.

54. Addenda/Corrigenda:

Addenda/Corrigenda to the tender document may be issued prior to the date of opening of the tenders to clarify documents or to reflect modification in the design or contract terms.

Each addenda/Corrigenda issued by the Owner will be distributed in duplicate to each person or organization to whom a set of tender documents has been issued and uploaded in the Institute's website. Each tenderer will retain one copy of each addenda/Corrigenda for submission along with his tender and return one signed copy to the Engineer-in-Charge as acknowledgement of receipt of the same. All addenda/Corrigenda issued/uploaded by the Owner shall become part of tender Documents. Bidders are advised to check the Institute's web site regularly for any such changes.

56. Identity Card:

Identity Card to all the workers / labourers under contractor's seal and signature for a specified period as per the terms of the contract and instructing them to carry the same during their movement/ work inside the CIT Kokrajhar campus. A list of labourers with their address to be submitted to the Engineer-in-charge & Security Officer of the Institute certifying that Identity Cards for them have been issued.

On completion of the work, the workers/ labourers must leave the campus within 3 days from the date of completion and the dwelling camps must be demolished within this period. The final or any bill of the work after completion will not be passed for payment without a certificate of vacation and demolition of the dwelling camp from the Security Officer.

57. Work in monsoon and dewatering:

The completion of the work may entail working in monsoon also. The Contractor must maintain minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered such work in monsoon.

During monsoon and other period, it shall be the responsibility of the Contractor to keep the construction work site free from water at his own cost.

59. Work Sundays and holidays:

For caring our work on Sundays and holidays, the Contractor will approached the Engineer-in-Charge or his representative at least two days in advance and obtain permission in writing.

60. Drawings to be supplied by the Owner:

Where drawings are attached with a tender, this shall be for the general guidance of the Contractor to enable him to visualize the type of work contemplated and scope of work involved. The Contractor will be deemed to have studied the drawings and formed an idea about the work involved.

Detailed working drawing on the basis of which actual execution of the work is to proceed will be furnished from time to time during the progress of work. The

Contractor shall be deemed to have gone through the drawings supplied to him thoroughly and carefully and in conjunction with all other connected drawings and bring to the notice of the Engineer-in-Charge discrepancies, if any, therein before actually caring out the work.

Copies of all detailed working drawings relating to the works shall kept at the Contractor's office on the site and shall be made available to the Engineer-in-Charge at any time during the contract. The drawings and other documents issued by the Owner shall be returned to the Owner on the completion of the work.

61. Materials to be supplied by Contractor:

The Contractor shall procure and provide the whole of the materials required for the construction including M.S. rods, cement and other building materials, tools, tackles, construction plant and equipment for the completion and maintenance of the works except the materials which will be issued by Owner and shall make his own arrangement for procuring such materials and for the transports thereof. The Owner may give necessary recommendation to the respective authority if so desired by the Contractor but assumes no further responsibility of any nature. The Owner will insist on the procurement of materials which bear ISI stamp and/or which are supplied by reputed suppliers borne on DGS & D list.

62. Inspection of Works:

The Engineer-in-Charge will have full power and authority to inspect the works at any time wherever in progress either on the site or at the Contractor's premises/workshops wherever situated, premises workshops of any person, firm or corporation where work in connection with the contract may be in hand or where materials are being or are to be supplied, and the Contractor shall afford or procure for the Engineer-in-Charge every facility and assistance to carry out such inspection. The Contractor shall, at all time during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-Charge or his representative to visit the work shall have been given to the Contractor, either himself be present to receive orders and instructions, or have responsible agent duly accredited in writing present for the 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. The Contractor shall give not less than seven days notice in writing to the Engineer-in-Charge before covering up or otherwise placing beyond reach of inspection and measurement any work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at Contractor's expense for carrying out such measurement or inspection.

No material shall be dispatched from the Contractor's godown before obtaining the approval in writing of the Engineer-in-charge.

The Contractor is to provide at all times during the progress of the work and the maintenance period proper means of access with ladders, gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurement of the works by the Engineer-in-Charge.

The Contractor shall make available to the Engineer-in-Charge free of cost all necessary instruments and assistance in checking of setting out of works and in the checking of any work made by the Contractor for the purpose of setting out and taking measurement of work

63. Tests for quality of Works:

All workmanship shall be of the respective kind described in the contract documents and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such test at Contractor's cost as the Engineer-in-Charge may direct at the place of manufacture or fabrication or on the site or at all or any such places. The Contractor shall provide assistance, instruments labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-Charge.

All the tests that will be necessary in connection with the execution of the work as decided by the Engineer-in-Charge shall be carried out at the field testing laboratory of the Owner/approved Agency by paying the charges as decided by the Owner from time to time. In case of non-availability of testing facility with the Owner, the required test shall be carried out at the cost of Contractor at government or any other testing laboratory as directed by Engineer-in-Charge.

If any tests are required to be carried out in connection with the work or materials or workmanship not supplied by the Contractor, such tests shall be carried out by the Contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.

64. Samples:

The Contractor shall furnish to the Engineer-in-Charge for approval when requested or if required by the specifications adequate samples of all materials and finishes to be used in the work. Such samples shall be submitted before the work is commenced and in ample time to permit tests and examinations thereof. All materials furnished and finished and finishes applied in actual work shall be full equal to the approved samples.

65. Defects prior to take over

If at any time, before the work is taken over, the Engineer in Charge shall decide that any work done or materials used by the Contractor or any sub-Contractor is defective or not in accordance with the contract or that the works or any portion thereof are defective or do not fulfill the requirements of contract (all such matters being herein called 'Defects' in this clause) as soon as reasonably practicable, he shall give to the Contractor notice in writing of the said decision, specifying particulars of the defects alleged to exist or to have occurred and the Contractor shall at this own expense and with all speed make good the defects so specified.

In the case Contractor shall fail to do so, the Owner may take, at the cost of the Contractor, such steps as may in all circumstances, be reasonable to make good such defect. The expenditure so incurred by the Owner will be recovered from the amount due to the Contractor. The decision of the Engineer-in-Charge with regard to the amount to be recovered from the Contractor will be final and binding on the Contractor. As soon as the works have been completed in accordance with the contract (except in minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof provided in of General Conditions of the Contract) and have passed the tests on completion. The Engineer-in-Charge shall issue a certificate (hereinafter called completion certificate) in which he shall certify the date on which the works have been so completed and have passed the said tests and the Owner shall be deemed

to have taken over the works on the date so certified. If the works have been divided into various groups in the contract, the Owner shall be entitled to take over any group or groups before the other or others and there upon the Engineer-in-Charge shall issue a completion certificate which will, however, be for such group or groups so taken over only.

66. Defects after Taking Over

In order that the Contractor could obtain a completion certificate he shall make good with all possible speed any defect arising from the defective materials supplied by the Contractor or workmanship or any act or omission of the contract or that may have been noticed or developed, after the works or group of the works has been taken over, the period allowed for caring out such work will be normally one month. If any defect be not remedied within a reasonable time, the Owner may proceed to do the work at Contractor's risk and expense and deduct from the final bill such amount as may be decided by the Owner.

If by reason of any default on the part of the Contractor a completion certificate has not been issued in respect of every portion of the works within one month after the date fixed by the contract for the completion of the works, the Owner shall be at liberty to use the works or any portion thereof in respect of which a completion certificate has not been issued, provided that the works or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these works for the issue of completion certificate.

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost, all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions.

SCHEDULE 'E'

	erence to General Con		
Nan	ne of work:		
Esti	mated cost of work. R		
			(to be returned after receiving
(-)		performance gua	` .
(ii)	Performance Guarar	atee : 5% of tendered	value.
()		sit: 5% of tendered	
	iii) struitiy z oper	Or	

5% of tendered value plus 50% of PG for contracts involving maintenance of the building and services/ other work after construction of same building and services/ other work.

SCHEDULE 'F'

General Rules & Direction:

Officer inviting tender	Registrar,
	CIT Kokrajhar, Bodoland Territorial
	Region,
	Kokrajhar, Assam - 783370
Maximum percentage for quantity of items	
of work to be executed beyond which rates	SEE BELOW
are to be determined in accordance with	
clauses 12.2 & 12.3.	

Definitions:

2(v)	Engineer-in-Charge	Chief Project Engineer, CIT Kokrajhar.	
2(viii)	Accepting Authority	Registrar, CIT Kokrajhar.	
2(x)	Percentage on cost of materials and labour to cover all overheads and profits	15%	
2(xi)	Standard Schedule of Rates	DSR 2019 with up to date correction slips and Market Rates	
2(xii)	Department	Engineering Cell, CIT Kokrajhar.	
9(ii)	Standard CITK contract Form	EC - 6 (for tendering) and EC - 8 as modified and corrected up to date	

Clause 1:

i)	Time allowed for submission of Performance Guarantee from the date of issue of letter of	
	acceptance	
ii)	Maximum allowable extension with late fee @	3 DAYS
	0.1% per day beyond the period provided in (i)	
	above	

Clause 2:

Authority for fixing compensation under	Chief Project Engineer, CIT Kokrajhar.
clause 2	

Clause 2A:

Whether clause	2A	shall	be	applicable	NO
(YES/NO)					

Clause 5:

Number of days from the date of issue of	10 DAYS
letter acceptance for reckoning date of	
start	
Time allowed for execution of work	Months (inclusive of hindrance
	due to monsoon seasons)

Milestone(s) as per table given below:

SI.	Description of Milestone	Time Allowed in	Amount to be with-
No.	(Physical)	days (from date of	held in case of non-
		start)	achievement of
			milestone
1	Achieved gross value of work	25% of project	1.25% of accepted
	equal to 1/8 th of the tendered	duration	tendered amount.
	amount.		
2	Achieved gross value of work		1.25% of accepted
	equal to 3/8 th of the tendered	duration	tendered amount.
	amount.		
3	Achieved gross value of work	75% of project	1.25% of accepted
	equal to 3/4 th of the tendered	duration	tendered amount.
	amount.		
4	Achieved gross value of work	100% of project	1.25% of accepted
	equal to 100% of the project	duration	tendered amount.
	amount.		

Note:-

- i) Request for rescheduling of milestones shall be made by the contractor, as per Appendix XVI.
- ii) Request for extension of time shall be made by the contractor, as per Appendix XVI pro forma of GCC.
- iii) In case of milestones are not achieved by the contractor, action under Clause-5 of the contract will be taken by the Chief Project Engineer, Engineering Cell, CIT Kokrajhar.

Authority to decide:

i)	Extension of time	Chief Project Engineer, CIT Kokrajhar.
ii)	Rescheduling of milestones	Chief Project Engineer, CIT Kokrajhar.
iii)		Chief Project Engineer, CIT Kokrajhar.
	delay in handing over of site	

Clause 5.2:

Nature of Hindrance Register	Physical	
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Schedule of handing over of site:

Part	Portion of site	Description	Time Period for handing
			over reckoned from date
			of issue of letter of intent.
Part A	Portion without any	Full site	10 days
	hindrance		
Part B	Portions with	N.A.	-
	encumbrances		
Part C	Portions dependent on	N.A.	-
	work of other agencies		

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Clause applicable (6 or 6A)	Clause 6A is applicable.
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Clause 7:

Gross work to be done together with net payment	Rs. 20 lakhs
/adjustment of advances for material collected, if any,	
since the last such payment for being eligible to	
interim payment	

Clause 7A:

Whether clause 7A shall be applicable	
(YES/NO)	
(No Running Account Bill shall be paid for the work	YES
till the applicable labour licenses, registration with	
EPFO, ESIC and BOCW Welfare Board, whatever	
applicable are submitted by the contractor to the	
Engineer-in-Charge.	

Clause 8A:

Authority to decide compensation on	Chief Project Engineer, CIT Kokrajhar.
account if contractor fails to submit	
completion plans	

Clause 10A:

List of testing equipment to be provided by the contractor at site lab:

Eist of testing equipment to be provided by	
1. Various Sizes of Sieves	2. Compressive Strength Testing
	Machine
3. Field density Test apparatus set	4. Cubes & Beams Mould
5. Flakiness Test apparatus set	6. Silt Content Test apparatus set
7. Bulkage Testing apparatus set	8. Vernier caliper and other required
	testing
	equipments
9. Survey Equipments i/c Total Station	10. Elongation Test apparatus set
11. Slump Cone apparatus set	12. Electric Oven
13. Electronic Weight Balance	14.LT Megger, multi meter.
15. Earth testing set	16. screw gauge
17. Tong tester	

All the other test equipments required at the time of execution at site other than the list shall to be provided by Contractor.

Clause 10 B(ii):

Whether	clause	10B(ii)	shall	be	No
applicable	(Yes/No))			

Clause 10C:

Component of labour expressed as percent of value of	25%
work	

Clause 10 CA:

Whether Applicable / Not applicable	

Authority to issue base price of materials

SI No.	Materials Covered under this clause:	structural steel and POL)	corresponding period of all the Materials covered
		for which All India Wholesale Price Index to be followed:	
1	Cement 43 grade	As per DG(W), CPWD	As per DG(W), CPWD
2	Steel Reinforcement Bars (TMT Bars Fe-500	As per DG(W), CPWD	As per DG(W), CPWD
3	Structural Steel – In tees, Flats, Channels, I section etc.	As per DG(W), CPWD	As per DG(W), CPWD
4	Structural tubular sections – RHS, CHS, SHS – YST 310		

includes Cement component used in RMC brought at site from outside approved RMC plants, if any.

Clause 10 CC:

Whether Applicable / Not applicable	
Clause 10 CC to be applicable in	
contracts with stipulated period of	months
completion exceeding the period shown	
in next column	
Schedule of component of other	
Materials, Labour etc. for price	
escalation. Component of civil (except	Xm%
materials covered under clause 10CA)	
/Electrical construction value of work	
Component of Labour - expressed as	
percent of total value of work.	Y%

Note: Xm% should be equal to (100) - (materials covered under clause 10CA i.e. Cement, Steel, POL and other material specified in clause 10CA + Component of Labour)

Clause 11:

Specification	to	be	followed	for	Particular	Specification	s of	CIT
execution of					Kokrajhar	and	Manufac	cturers
Work					specification	s for	spec	ialized
					items.CPWD) specifica	tions	2019
					Volume I &	II, New De	lhi with	up to
					date correct	tion slips for	civil	works,
					Particular/	Technical spe	ecificatio	ons of

Base price and its corresponding period of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT. In case of recall of tenders, the base price may be modified by adopting latest base price and its corresponding period.

CITK, MoRTH specifications.
CPWD Specifications Part I (Int.E.I.) – 2013, Part II (Ext.E.I.) – 1994, Part III
(Lifts & Escalators) - 2003, Part IV
(Substations) – 2013, Part V (Wet riser &
Sprinkler Systems) – 2020, Part VI (Fire
Detection and Alarm Systems) – 2018,
Part VII (DG Sets) – 2013, Part VIII
(Gas based fire extinguishing systems) –
2013, HVAC Works – 2017 with up-to-
date correction slips, Specifications of
CITK and Manufacturers specifications
for specialized item of work.

Clause 12: Type of Work (Maintenance/Project or Original Work)

12.2&12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building work	30%
12.5	(i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items)	30%
12.5	ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items	100%

Clause 16:

Competent Authority for deciding reduced	Chief	Project	Engineer,	CIT
rates	Kokrajł	nar.		

Clause 17:

	Defect Liability Period	12 (Twelve) months
--	-------------------------	--------------------

Clause 18:

List of mandatory machinery,	To be provided as per NIT & other machinery
tools & plants to be deployed	required for timely completion of work.
by the contractor at site	

Clause 19:

Clause	Authority to decide penalty for each	Chief Project Engineer, CIT
19C	default	Kokrajhar
Clause	Authority to decide penalty for each	
19D	default	Kokrajhar
Clause	Authority to decide penalty for each	Chief Project Engineer, CIT
19G	default	Kokrajhar
Clause	Authority to decide penalty for each	
19K	default	Kokrajhar

Clause 32: Requirement of Technical Representative(s) and recovery Rate

Sl	Minimum		Designatio		No.	Rate at which
No.	Qualification of		n (Principal	ıce		recovery shall
	Technical		Technical/	ier		be made from
	Representative		Technical	Experience		the contractor
			representati	Ex		in the event of
		ine	ve)	H		not fulfilling
		Discipline		Minimum		provision of
		isc		[<u>:</u>		clause 32(i)
		D		Z		per month
1	Graduate Engineer	Civil	Sr. Site	3 yrs	2	Rs. 40,000/-
	_		Engineer			
2	Graduate	Civil /	Supervisor	3 yrs	3	Rs. 20,000/-
		Electrical	_	-	2	

Note: Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 38:

i)	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of:	Delhi Schedule of Rates 2019 with correction slips up to last date of submission of bids
ii)	Variations permissible on theoretical quantities:	
a)	Cement: For works with estimated cost put to tender not more than Rs. 25 lakh.	3% plus/minus
b)	Cement: For works with estimated cost put to tender more than Rs. 25 lakh.	2% plus/minus
c)	Bitumen: All works	2.5% plus only & nil on minus side.
d)	Steel Reinforcement and structural steel sections	2% plus/minus
	for each diameter, section and category	
e)	All other materials.	NIL

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION:

Sl.	Description of item	Rates in figures and words made from the contractor	at which recovery shall be
No.		Excess beyond	Less use beyond the
		permissible variation	permissible variation
1	Cement	NIL	Rs. 6,900/- per MT
2	Reinforcement-TMT	NIL	Rs. 64,250/- per MT
	500		_
3	Structural Steel	NIL	Rs. 64,250/- per MT
4	Paving Asphalt VG-30	NIL	Rs. 55,300/- per MT
5	Other materials	If applicable,110% of	110% of base rate
		base rate	considered

CHECKLIST

A. Check list of documents (All documents should be signed, stamped, serially arranged/ indexed and submitted under Technical Bid)

Sl. No	Particulars of Document	Whether Enclosed	
		(Yes/No)	
1	DD for EMD		
2	DD for Cost of Tender Document		
3	Contractor License		
4	Certificate from CA stating the Annual Turnover for		
	last consecutive 5 FYs		
5	Profit & Loss Statement and Balance Sheet of last 05		
	years duly audited by CA		
6	Declaration and Acceptance		
7	Schedule "B" to Schedule "F"		
8	Self attested copy of valid Labour license or notarized		
	declaration otherwise		
9	Self attested copy of PAN card, GST, EPF Certificate,		
	ESI Certificate		
10	Letter of Transmittal		
11	Form "A", "B", "C', "D", "E" of Evaluation Criteria		
12	Self attested copy of experience certificates		
	establishing an experience of similar work (Work		
	Order and Completion Certificate)		
13	Submission of Tender		
14	Integrity Pact		
15	Integrity Agreement		
16	Annexure – I to Annexure – XIV		
17	Affidavit		
18	Financial Bid Form (BoQ) Schedule "A"		

- **I. Technical Bid** All documents from Sr. No. 1 to 17 (as mentioned in the above checklist) must be signed and stamped by the authorized signatory. They must then be properly indexed and submitted under Technical Bid.
- **II. Financial Bid** Financial Bid Form (BoQ), Sr. No. 18, must be submitted separately filled up under Financial Bid (BoQ).

^{**(}Signed documents in original along with signed bid document in sealed envelop to be reached before the submission date and time at CIT Kokrajhar)**

CENTRAL INSTITUTE OF TECHNOLOGY KOKRAJHAR

Submission of Tender

To The Registrar, Central Institute of Technology Kokrajhar – 783370, Assam

- 1. I/We hereby tender for execution of the work "Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar" as per tender document within the time schedule mentioned therein and accepted by me/us, at the schedule of rates quoted by me/us for the whole work in accordance with terms and conditions, specifications, drawings, as detailed in the tender document.
- 2. It has been explained to me/ us that the time stipulated for job and completion of works in all respects and in different stages mentioned in the "Time schedule" of completion of work and signed and accepted by me/us is the essence of the Contract. I/We agree that in the case of failure on my/ our part to strictly observe the time of completion mentioned for work or any of them and to the final completion of works in all respects according to the schedule set out in the said "Time Schedule of Completion of work", I/We shall pay compensation to the Owners as per provision and stipulations contained in clause-23 of General conditions of Contract and I/We agree to the recovery being made as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however, be granted by the Engineer-in-Charge at his entire discretion for some items of work, and I/We agree that such extension of time will not be counted for the extension of completion dates stipulated for work and for the final completion of works as stipulated in the said "Time Schedule" of Completion of work.
- 3. I/We agree to pay the earnest money and security deposit and accept the terms and conditions laid down in the memorandum below in this respect.

MEMORANDUM

(a)	General work	description	of	:
(b)	Earnest M	Ioney		(Rupees)(only). The Earnest money is payable in the manner set out in para 5, below. The Earnest money, if the tender is accepted, will be retained against the security deposit.
(c)	Security I	Deposit		: 5% of the contract amount which will be paid in the manner set out in clause (19) in section IV

(a)	Performance Guarantee	(Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement.
(e)	Time allowed for starting of work	: months from the date of issue of letter of acceptance of the tender
4.	terms and conditions referred to the Owner or its successors	ed I /We hereby agree to abide by and fulfill all to above and in default thereof, to forfeit and pay or its authorised nominees such sums of money as ontained in Notice Inviting Tender and other tender
5.		earnest money of `
	Draft/) in the form of Banker's cheque /Demand (Name and Office of the State Bank of India or wour of "CIT Kokrajhar" payable at 'Kokrajhar'.
6.	above, or I/We fail to depose Memorandum in para (3) a successors without prejudice the said earnest money in full by Owner, towards the secur Owner shall also be at libert	e work specified in the memorandum in para (3) it the amount of security deposit specified in the above, I/We agree that the said Owner and its to any other right or remedy be at liberty to forfeit otherwise the said earnest money shall be retained rity deposit specified in para (3) above. The said by to cancel the notice of acceptance of tender if ity amount as aforesaid or to execute an agreement in the tender documents.
	similar nature and magnitude	nce of my/our experience of execution of work of carried out by me/us in the prescribed proforma Sales Tax Clearance Certificate.
		Dateday of2020
Witr	ness:	
		Name in Block Letters:
		Address:
		Signature of Tenderer(s), with the seal of Firm

of the General Conditions of Contract

INTEGRITY PACT

To,

Registrar,

Central Institute of Technology

Kokrajhar.

Sub: Submission of Tender for the work of "Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar".

Dear Sir,

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 CIT Kokrajhar. 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, CIT Kokrajhar shall have unqualified, absolute and unfettered right to disqualify the tender/bidder and reject the tender/bid is accordance with terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

INTEGRITY AGREEMENT

(on non judicial stamp paper of appropriate value)

This Integrity Agreement is made at on this
BETWEEN Central Institute of Technology Kokrajhar (Hereinafter referred as the (Address of Division) 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns) AND
authorized signatory) (Hereinafter referred to as the "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns).
Preamble
WHEREAS the Principal / Owner has floated the Tender (NIT No
AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).
AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.
NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:
Article 1: Commitment of the Principal/Owner
(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
(a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
(b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to

- any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- (c) The Principal/Owner shall endeavor 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) commits 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 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 IPC 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.

Article 7- Other Provisions

- 1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2. Changes and supplements need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original 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:
(signature, name and address)
(signature, name and address)
Place: Dated:

ANNEXURE - I

DECLARATION FOR WEBSITE DOWNLOADED & NON TAMPERED TENDER DOCUMENT

that I/We have downloaded th	Tender Document from the website not tampered the tender document issued vide 020/1207 Dt 04/12/2020,
, C	that the information given above is false on the absolute right to take any action as deemed find
	SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE-II

Partic	ulars of contractor:
1.	Name & Address of Contractor/ firm :
	Telephone no. :
	Fax no. :
2.	Whether the firm is private or public
	limited (attested copies of deed
	for articles of Association to be enclosed) :
3.	Name of person holding the power of attorney :
	(attested copy of power of attorney to be enclosed)
	State his present nationality and liabilities :
4.	Name of partners, their present nationalities
	with their liabilities(attested copy of partnership
	deed to be enclosed) :
5.	Name & Address of Bankers :
	I/ We authorise Central Institute of Technology, Kokrajhar to make any investigation to verify the correctness of the statements and documents submitted with this application and obtain clarifications or information on the technical a financial aspects of the applicant.

Seal of the Company

Date :....

Signature of Company/ Contractor

ANNEXURE-III

Financial statement:

/.	a) Current Period	•	
 7.	Net profit before tax		
Curr	ent year (projected)	One Year before	Two Year before
6. last t	three years.	uilding construction works, u	
-	c) Ratio of total liability		
	receivable to current lia		
	· · · · · · · · · · · · · · · · · · ·	rary investment held in lieu of	f cash and current
	a) ratio of current assets	to current liabilities.	
5.	Total Liabilities	:	
	f) Annual turnover for l	ast 3 years.	
	e) Net Worth		
	d) Working capital		
	c) Current Liabilities		
	b) Current assets		
	a) Cash		
4.	Financial Position		
3.	Attach audited balance three years.	sheet and profit & Loss staten	nent for the last
	b) Issued & paid up	:	
	a) Authorised	:	
2.	Capital		
	(partner in case of Joint	Venture/ consortium)	
1.	Name of the contractor	/ firm :	
(to t	be given separately for each	h partner in case of Joint Vent	ture/ Consortium)

	b) During the last financial year	
	c) During each of the three previous finance	ial years.
The pr	profit and loss statements have been certified t	hrough by
8.	Applicant's financial arrangements	
	a) Own resources:	
	b) Bank credits :	
	c) Others (specify):	
9.	Details and value of property owned by the	e Applicant
	(Attached Valuation Report Bankers refere	nce).
10.	Approximate value of works in hand	:
11.	Value of anticipated orders for next financi	al year :
Seal of	of Company Signa	ture of Company/ Contractor
Date		

ANNEXURE-IV

Banker's solvency certificate from schedule bank:

This is to certify that to the best of our knowledge and information
M/s
(Name and Address of the applicant/ contractor)
a customer of our bank is respectable and can be treated as good for any engagement upto a limit of Rs
This certificate is issued without any guarantee or responsibility on the part of in the Bank or any its officers.
Signature and Seal of the Bank
Name of the Bank
Address
Date

ANNEXURE -V

Details of key personnel to be employed for the proposed works:

	Designation	Name of Nominee	Qualification, Experience & present of posting
			or present or posting
Project Management			
Planning & monitoring			
Engineering Supervision & Measurements			
Quality Control			
Material Management			
Accounts			
Other Staff			

NOTE: Non deployment of Engineers as per the list will attract penalty as per clause no.32 of GCC.

Seal of Company	
	Signature of Company/Contractor
Date:	

ANNEXURE VI

work:	i piants & equij	pments prop	osed to be us	ed by the contractor for the
Description	 Manufa	acturer	Capacity	Nos. Proposed to be
		with year of	1 2	vork Make etc.)
construction	will not be les	s than those	e listed above	equipment he will deploy for e, and agrees to bring more neer, at no extra cost to CIT,
Seal of the Co	ompany	_	ature of Comp	any/ Contractor
	Contractor shoul alue with Notori			Non Judicial Stamp paper of

ANNEXURE-VII

Compliance to requirement of tender documents:

We confirm that our tender complies with the total techno-commercial requirements of bidding document without any deviation.

Signature of Company/ Contractor

ANNEXURE - VIII

TENDER VALIDITY

Tender shall remain valid for acceptance for a period of 120 (One Hundred Twenty) days from the date of opening of the tender. The tenderer shall not be entitled during the said period to revoke or cancel his tender or to vary the tender given or any term thereof. In case of tenderer revoking or cancelling his tender or varying any term in regard thereof, the OWNER shall forfeit the earnest money paid by him along with the tender. Tender shall be revalidated for extended period as required by Owner in writing.

Signature of Company/ Contractor

ANNEXURE – IX

Turnover for during the last five years:

Year 2015-2016 =

Year 2016-2017 =

Year 2017-2018 =

Year 2018-2019 =

Year 2019-2020

Seal of Company Signature of Company/ Contractor Date :.....

Note: Original or Attested / Notarized copies of work order and completion certificates from the client should be attached by the applicant.

ANNEXURE – X

(Non judicial Stamp Paper of Rs.100) <u>Memorandum of Understanding</u>

This Memorandum of Understanding (MOU) is made on the	at
Between	which
And	
having its registered office at	represented.
unless repugnant to the subject or context include its administrators, suc assigns.	
Whereas, CIT Kokrajhar, have issued tender papers to quote for the follow M/s (main contractor)	ing work to
Name of Work:	
Whereas, This Memorandum of Understanding has been entered into Electrical works for the above work by M/s	
Whereas, both the parties have gone through and understood the various c clauses of the tender and willingly agree to abide by them.	onditions &
This MOU shall be valid till the duration of completion of above work a extended if so required by the CIT Kokrajhar.	and shall be
In witnesses thereof we have put our hand and seal on dated	
For(Main contractor) For(Associate Electrical co	ntractor)
Witness	

ANNEXURE - XI

CERTIFICATE FOR ASSOCIATING ELECTRICAL AGENCY

This	is certified that we have not deviated from the technical specification and
comm	nercial provisions provided in the tender.
The P	rice bid is unconditional.
This i	is certified that we have engaged M/s as
Electr	rical contractor of appropriate class as detailed below:
i.)	Name of Electrical Contractor: M/s
ii.)	Address :
iii.)	Class of Registration :
iv.)	Maximum ceiling limit to execute electrical work. :
v.)	Details of Registration of the Electrical Contractor

S.No	Department	Registered Yes/No	Registration No.	Tendering limits Lacs	Validity of Registration	Debarred from Tendering Yes/No
1	2	3	4	5	6	7
1.						
2.						
3.						

Note: - All columns of above Performa must be filled in.

Contractor's Signature

CONSENT LETTER

I hereby give my consent to work as electrical contractor till the completion of work. Also I will be responsible for necessary action to hand over the installation and for rectification of defects and repair during the obligatory maintenance period. I will execute the work as per NIT Specifications and Additional Conditions of the Contract.

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

Dated:

Signature of Electrical Contractor (** Strikeout if Not Applicable**)

ANNEXURE - XII

PRE-RECEIPT FOR REFUND OF EMD

Received with thanks from CIT Kokrajhar, a sum of Rs, towards refund of Earnest Money Deposit paid in respect of Tender for "Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar" for office of Registrar, CIT Kokrajhar vide NIT No.: CITK/MC/NIT/405/2020/1207 Dt.-04/12/2020

SIGNATURE OF THE BIDDER WITH SEAL

(Note: EMD will be returned to Bidder only after final decision of the tender)

ANNEXURE – XIII

DECLARATION REGARDING ACCEPTANCE TO TERMS & CONDITIONS OF THE TENDER

1. I/We,		Director/authorized	sign	signatory of th	the	the Company		M/s	
			, is	competen	t to	sign	this	declaration	and
exe	cute this te	nder document.							

- 2. I have carefully read, understood and accept all the terms and conditions of the tender and undertake to abide by them.
- 3. The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / we, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE – XIV

PERFORMA FOR NO NEAR RELATIVE (S) OF THE CONTRACTOR WORKING IN CIT KOKRAJHAR

(To be executed on Rs.20/- Stamp paper & attested by Public Notary/Executive Magistrate by the bidder)

I, M/s	nd that the information given by me is
The near relative (s) means:	
a) Members of a Hindu Undivided family;	
b) They are husband and wife.	
c) The one is related to the other in manner as (daughter-inlaw), Daughter (s) & daughter's his brother's wife, sister (s) sister's husband (brother	usband (son-in-law) brother (s) and
SIGNAT	URE OF THE BIDDER WITH SEAL

AFFIDAVIT

DECLARATION REGARDING BLACKLISTING/ NON-BLACKLISTING

	Date This affidavit should invariably be made in non-judicial stamp paper
	Name of Firm
	Title of Office
	(Signed by an Authorised Officer of the Firm)
6.	In addition to the above, CIT Kokrajhar, will not be responsible to pay the bills for any completed / partially completed work.
5.	In case the above information found false I/We are fully aware that the tender/contract will be rejected/cancelled by CIT Kokrajhar, and EMD/SD shall be forfeited.
4.	The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department/ Project implementing agency.
3.	The undersigned hereby authorize(s) and requested any Bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
	work by CPWD/ State PWD in India nor awarded to us for such works have been blacklisted/rescinded, during the last five years prior to the date of this bid.
2.	The undersigned also hereby certifies that neither our firm M/s
	required attachments are true and correct.

GENERAL GUIDELINES

- 1. This book of "General Conditions of Contract" is applicable to both types of tenders i.e. "Percentage rate tenders and Item rate tenders". Accordingly, alternative provisions for conditions Nos. 4A, 9 & 10 of the General Rules and Directions are given in this book. The appropriate alternatives will be applicable in specific cases depending on whether this is used for percentage rate tender (EC-7) or item rate tender (EC-8).
- 2. EC-6, Schedules A to F, special conditions/specifications and drawings etc. will be part of NIT and shall be uploaded.
- 3. The intending bidders will quote their rates in Schedule A and schedule A to F and performa for registers are only for information and guidance.
- 4. Authority approving the Notice Inviting Tenders (NIT) shall fill up all the blanks in EC-6 and in Schedules B to F before issue of Tender Papers.
- 5. The intending bidders will quote their rates in Schedule A.
- 6. The proforma for registers and Schedules A to F are only for information and guidance. These are not to be filled in the Standard Form. The Schedules with all blanks, duly filled, shall be separately issued to all intending tenderers.

GENERAL CONDITIONS OF CONTRACT (GCC) SECTION - 1

1. Definition of Terms

- In the contract document as herein defined where the context so admits, the following words and expressions will have the following meanings:
- 1.1 "The Owner" means the Central Institute Technology Kokrajhar having its registered office at Kokrajhar-783370.
- 1.2 "The Contractor" means the person or the persons, firm or company whose tender has been accepted by the Owner and includes the Contractor's legal representative, his successor and permitted assignees.
- 1.3 The "Engineer-in-Charge" shall mean the "Chief Project Engineer" designated as such by the Owner and shall include those who are expressly authorized by the Owner to act for and on his behalf for operation of this contract.
- 1.4 The "Work" shall mean works to be executed in accordance with the contract or part thereof as the case may be and shall include all extra, additional altered or substituted works as required for the purpose of the contract.
- 1.5 The "Permanent work" means works as handed over to the Owner by the Contractor on completion of the contract.
- 1.6 "Construction Equipment" means all applications and equipment of whatsoever nature for the use in or for the execution, completion, operation or maintenance of the work unless intended to form part of the Permanent work.
- 1.7 "Site" means the areas on which the permanent Works are to be executed or carried out and any other places provided by the Owner for purpose of the contract.
- 1.8 "Contract Document" means collectively the Tender Document, Designs, Drawings, Specifications, agreed variations, if any, and such other documents constituting the tender and acceptance thereof.
- 1.9 "The Sub-Contractor" means any person or firm or Company (other than the Contractor) to whom any part of the work has been entrusted by the Contractor, with the written consent of the Engineer-in-Charge, and the legal personal representatives, successors and permitted assigns of such person, firm or company.
- 1.10 The "Contract" shall mean the Agreement between the Owner and the Contractor for the execution of the works including therein all contract documents.
- 1.11 The "Specification" shall mean the various technical specifications attached and referred in the tender documents. It shall also include the latest edition including all addenda/corrigenda of relevant Indian Standard Specifications published before entering into Contract.
- 1.12 "The Drawings" shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Engineers-in-Charge and such other drawings as may required, from time to time, or furnished or approved in writing by the Engineer-in-Charge.

- 1.13 The "Tender" means the tender submitted by the Contractor for acceptance by the Owner.
- 1.14 The "Alteration Order" means an order given in writing by Engineer-in-Charge to effect additions to or deletion from and alteration in the work.
- 1.15 The "Completion Certificate" shall mean the certificate to be issued by the Owner when the works have been completed to his satisfaction.
- 1.16 The "Final Certificate' in relation to a work means the certificate issued by the Owner after the period of liability is over.
- 1.17 The "Period of Liability" in relation to a work means the specified period from the date of issue of completion certificate up to the date of issue of final certificate during which the Contractor stands responsible for rectifying all defects that may appear in the works.
- 1.18 The "Appointing Authority" for the purpose of arbitration shall be the Registrar, Central Institute of Technology, Kokrajhar or any other person so designated by the Owner.
- 1.19 'Tendering period' means the period from the date of invitation of tender to date of submission of tender.
- 1.20 'Consultant' means the consultant engaged by the 'Owner' for the work. He will report to the Owner.
- 1.21 "LOI" means the Letter of Intent awarded the contractor after successful financial evaluation.
- 1.22 "LOC" means the Letter of Commencement of the work after submission of performance guarantee within days of the LOI.
- 1.23 Time of start of the work will be calculated from the date of the LOC.
- 1.24 "Similar Works" means the Supplying Installation and Commissioning of Fire Hydrant System and related works..

1. Scope and Performance

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 documents. None of these documents shall be used for any purpose other than that of this contract.

2. Works to be carried out

The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labourers, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule- A) 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 recognized principles.

3. Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices 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.

4. Discrepancies and Adjustment of Errors

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.

In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:-

- (i) Description of Schedule of Quantities.
- (ii) Particular Specification and Special Condition, if any.
- (iii) Drawings.
- (iv) CPWD Specifications.
- (v) Indian Standard Specifications of B.I.S.

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.

Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom 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.

5. Signing of Contract

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:-

- (i) the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- (ii) Standard C.P.W.D. Form as mentioned in Schedule 'F' consisting of:
- (a) Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.
- (b) Safety Code.
- (c) Model Rules for the protection of health, sanitary arrangements for workers employed bycontractors.
- (d) Contractor's Labour Regulations.
- (e) List of Acts and omissions for which fines can be imposed..
- (iii) No payment for the work done will be made unless contract is signed by the contractor.

SECTION - 2

CLAUSES OF CONTRACT

Clause 1

Performance Guarantee

The contractor shall submit an irrevocable Performance Guarantee of 5% (i) (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 up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government 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 Government to make good the deficit

Fixed Deposit Receipt or Bank Guarantee from any Nationalized Bank duly "pledged in the name of the CIT Kokrajhar"

- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus minimum 60 days beyond that, if the same is submitted by the agency on scheduled format I as per GCC. If the same is submitted on the format II as per GCC, then the Performance Guarantee shall be valid up to the stipulated date of completion plus minimum 6 months beyond that. In case the time for 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. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.
- (iii) The Engineer-in-Charge shall make a claim under the performance guarantee except for amounts to which the CIT Kokrajhar is entitled under the contract (not withstanding 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 Engineer-in-Charge may claim the full amount of the Performance Guarantee.
- (b) Failure by the contractor to pay President of India 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 President of India.
- (v) On substantial Completion of any work which has been completed to such an extent that the intended purpose of the work is met and ready to use, then a provisional Completion certificate shall be recorded by the Engineer-in-Charge. The provisional certificate shall have appended with a list of outstanding balance item of work that need to be completed in accordance with the provisions of the contract.

This provisional completion certificate shall be recorded by the concerned Engineer- in-charge with the approval of Superintending Engineer /Project Manager / Chief Engineer/Chief Project Manager, if required. After recording of the provisional Completion Certificate for the work by the competent authority, the 80 % of performance guarantee shall be returned to the contractor, without any interest.

However in case of contracts involving Maintenance of building and services /any other work after construction of same building and services/ other work, then 40% of performance guarantee shall be returned to the contractor, without any interest after recording the provisional Completion certificate.

Clause 1A

Recovery of Security Deposit

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Government 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 and final bill till the sum deducted will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by Government 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 Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government 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 Government 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 Government 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 India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-Charge, 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 and the final bill of the contractor at the rates mentioned above.

The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs.5 lac subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lac. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.

In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

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 justified extended date of completion as per clause 5 (excluding any extension under Clause 5.5) as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of accepted Tendered Value of the work for every completed day/ month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

Compensation for delay of work with maximum rate @ 1% (one percent) per month of delay to be computed on per day basis based on quantum of damage suffered due to stated delay on the part of Contractor.

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % (ten percent) of the accepted Tendered Value of work or of the accepted.

Clause 3

When Contract can be Determined

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to any other rights or remedy against the contractor in respect of any delay, not following safety norms, 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:

- a. If the contractor having been given by the Engineer-in-Charge 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 un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- b. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- c. If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Engineer in Charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer-in-Charge the contractor will be unable to complete the same or does not complete the same within the period specified.
- d. 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 Engineer-in-Charge.
- e. If the contractor shall offer or give or agree to give to any person in Government 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 Government.
- f. If the contractor shall enter into a contract with Government in connection with which commission has been paid or agreed to be 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 Engineer-in-Charge.

- g. If the contractor had secured the contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- h. If the contractor 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.
- i. 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.
- j. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- k. If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), 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 Engineer -in-Charge. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the CIT Kokrajhar shall have powers:
 - a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, Security Deposit already recovered, Security deposit payable and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government
 - b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work. In the event of above courses 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

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 3 A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract by giving notice to the other party stating the reasons. In such eventuality, the Performance Guarantee of the contractor shall be refunded within following time limits:

If the Tendered value of work is up to Rs. 1 Crore	15 days.
If the Tendered value of work is more than Rs. 1 Crore and upto	21 days
If the Tendered value of work exceeds Rs. 10 Crore	30 days

Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the contract by either party.

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 Engineer-in-Charge 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 Engineer-in-Charge 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 Engineer-in-Charge 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 Engineer-in-Charge) 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, clerk of the works, foreman or other authorized 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 Engineer-in-Charge 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 expenses 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 the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the Government without prejudice to any other right or remedy available in law.

- 5.1 As soon as possible but within 7 (seven) working days of award of work and in consideration of
 - a) Schedule of handing over of site as specified in the Schedule 'F'
 - b) Schedule of issue of designs as specified in the Schedule 'F',
 - the Contractor shall submit a Time and Progress Chart for each mile (i) stone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The work programme shall include all details of balance drawings and decisions required to complete the contract with specific dates by which these details are required by contractor without causing any delay in execution of the work. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the 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 Engineer- in-Charge and the Contractor within the limitations of time imposed in the Contract documents
 - (ii) In case of non submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.
 - (iii) The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.
 - (iv) The contractor shall submit the Time and Progress Chart and

progress report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery as per Schedule F to be decided by the NIT approving authority shall be made on per week or part basis in case of delay in submission of the monthly progress report.

- 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 Engineer-in-Charge in executing work not forming part of the Contract, or
 - (vi) any other cause like above which, in the reasoned opinion of the Engineer-in- Charge 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 Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.

- In case the work is hindered by the Department or for any reason / event, for which the Department is responsible, the authority as indicated in Schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the contractor shall be entitled to only extension of time and no damages.
- 8.4 Request for rescheduling of Mile stones or 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 forms i.e. Form of application by the contractor for seeking rescheduling of milestones or Form of application by the contractor for seeking extension of time (Appendix -XVI) respectively to the authority as indicated in Schedule 'F'. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or

extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the contractor shall produce a revised programme which shall include all details of pending drawings and decisions required to complete the contract and also the target dates by which these details should be available without causing any delay in execution of the work. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised programme.

- 5.4.1 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. Engineer -in- Charge shall finalize/ reschedule a particular mile stone before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non application by the contractor for extension of time E-in-C after affording opportunity to the contractor, may give, supported with a programme (as specified under 5.4 above), a fair and reasonable extension within a reasonable period of occurrence of the event.
- 5.5 In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The contractor shall be liable for levy of compensation for delay for such extension of time.

Clause - 6

Measurements of Work Done

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done. All measurement 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 authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer in-Charge and the contractor or their representatives 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 both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-inCharge 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 authorized representative does not remain present at the time of such measurements after the contractor or his authorized 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 measurement, 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 authorized representative in charge 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 authorized 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 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 authorized 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 or 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

Computerized Measurement Book

All measurements of all items having financial value shall be entered by the contractor and compiled 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 measurements 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 computerized measurements, and submit to the department a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/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, after getting the earlier MB cancelled by the department. Thereafter, the MB shall be taken in 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 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 Engineerin-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 of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineerin-Charge or his authorized 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 placed beyond the reach of checking and/or checking 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 allowance shall be made for such work or the materials with which the same was executed.

Engineer-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 from 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

No payment shall be made for work, estimated to cost Rs. Twenty lac or less till after—the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs, Twenty lac the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department 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 the amount specified in Schedule 'F', 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, 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 contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Authorized Engineer together with the account of the material issued by the department, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer- in-Charge, the period of ten working days will be extended to fifteen working days. In case of delay in payment intermediate bills after 45 days of submission of bill by the contractor provided the bill submitted by the contractor found to be in order, a simple interest @ 5% (five percent) per annum shall be paid to the contractor from the date of expiry of prescribed time limit which will be compounded on vearly basis.

All such interim 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-in-Charge 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.

The Engineer-in-Charge in his sole discretion on the basis of a certificate from the Asstt. Engineer to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill(s) to be submitted by the contractor within 10 days of the interim payment. In case of delay in submission of bill by the contractor a simple interest @ 10% per

annum shall be paid to the Government from the date of expiry of prescribed time limit which will be compounded on yearly basis.

In case of composite tenders, running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor component shall be made by the Engineer-in-Charge of the discipline of minor component directly to the main contractor.

In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment, then on the written complaint of contractor associated for such minor component, Engineer in charge of minor component shall serve the show cause to the main contractor and if reply of main contractor either not received or found unsatisfactory, he may make the payment directly to the contractor associated for minor component as per the terms and conditions of the agreement drawn between main contractor and associate contractor fixed by him. Such payment made to the associate contractor shall be recovered by Engineer-in-charge of major or minor component from the next R/A/ final bill due to main contractor as the case may be.

Clause 7A

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.

Clause - 8

Completion Certificate

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 off 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 realized by the salethereof.

Clause – 8A

The contractor shall submit completion plans for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work, provided that the service plans having been issued for execution by the Engineer-in-Charge, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum of 0.1 % (zero point one percent) of accepted Tendered Value or limit prescribed in Schedule F whichever is more as may be fixed by the authority as mentioned in Schedule F and in this respect the decision of the that authority 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. No further claims shall be made by the contractor 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 the period specified here in under, the period being reckoned from the date of receipt of the bill by the Engineer- in- Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.

If the Tendered value of work is up to 1 Crore	2 months
If the Tendered value of work is more than Rs 1 Crore and Upto Rs. 10 Crore	3 months
If the Tendered value of work exceeds Rs. 10 Crore	6 months

If the final bill is submitted by the contractor within the period specified above and payment of final bills is made by the deptt. after prescribed time limit, a simple interest @ 5 % per annum shall be paid to the contractor from the date of expiry of prescribed time limit which will be compounded on yearly basis, provided the final bill submitted by the contractor is found to be in order.

Clause - 10A

Materials to be provided by the Contractor

The contractor shall, at his own expense, provide all materials, required for the works including water supply and power supply. Owner will not be supplying power for this work, if required, it will be on chargeable basis as per electricity tariff plan. All the works by the Contractor in this regard will be done as per the Indian Electricity Act and rules framed there under and as approved by the Engineer-in-Charge.

The contractor shall, at his own expense and without delay; supply to the 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 thirty days of supply of samples or within such further period as he may require 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 specifications, 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 authorized representative shall at all times have access to the works and to all 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 substituted 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.

The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.

Secured Advance on Materials

(i) 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 up to 75% of the assessed value of any materials or an amount not exceeding 75% of the material element cost in the tendered rate of the finished item of the work, whichever is lower ,which are in the opinion of the Engineer-in- Charge non-perishable, non- fragile and non-combustible 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-in-Charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer- in-Charge 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 within one month of the order to commence the work. Such advance shall be in two 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.

Before any installment of advance is released, the contractor shall execute a Bank Guarantee Bonds not more than 6 in number from Scheduled Bank for the amount equal to 110% of the amount of advance and valid for the period till recovery of advance. This (Bank Guarantee from Scheduled Bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

Interest & Recovery

(iii) The mobilization advance in 3.0 above bear simple interest at the rate of 10 percent 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 percent 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 percent 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.

(iv) 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 may be extended at the discretion of the Engineer-in-Charge.

Clause - 10C

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

If the prices of materials 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. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than 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 up to this quarter : (A)
- (b) Gross value of work done up to the last quarter : (B)
- (c) Gross value of work done since previous quarter (A-B) (C)
- (d) Full assessed value of Secured Advance fresh paid in this guarter: (D)
- (e) Full assessed value of Secured Advance recovered in this quarter : (E)
- (f) Full assessed value of Secured Advance for which escalation 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/deviated quantities of items paid as per Clause 3.5. Based on prevailing market rates during this quarter: (J)

Then,
$$M = C+F+I-J$$

 $N = 0.85 M$

Cost of work for which escalation is applicable:

$$W = N$$

- (iii) Components for materials (except cement, reinforcement bars, structural steel, POL) labour, etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'F'. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the contractors.
- (iv) The compensation for escalation for other materials shall be worked as per the formula given below:- Adjustment for civil component / electrical component of construction 'Materials'

$$Vm = W \times (Xm/100) \times (MI-MI0)/MI0$$

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.

Xm = Component of 'materials' (except cement, structural steel, reinforcement bars POL) expressed as percent of the total value of work.

MI = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/ Group Items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group Items. (In respect of the justified period extended under the provisions of the contract without any action, the index prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on prorata basis only as cost of extra work x stipulated period/tendered cost, shall be considered.) If updated stipulated date of completion as calculated on pro- rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

MIO = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/Group Items valid on the last stipulated date of receipt of tender including extension, if any, as published by the Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/ Group items.

*Note: relevant component only will be applicable.

Clause - 10CA

Payment due to variation in prices of materials after receipt of tender

If after submission of the tender, the price of materials specified in Schedule F increases/ decreases beyond the base price(s) as indicated in Schedule F 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 updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work x stipulated period/tendered cost). If updated stipulated date of completion as calculated on pro-rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

The increase/decrease in prices of cement, steel reinforcement, structural steel and POL shall be determined by the Price indices issued by the Director General, CPWD. For other items provided in the Schedule 'F', this shall be determined by the All India Wholesale Price Indices of materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry. Base price for cement, steel reinforcement, structural steel and POL shall be as issued under the authority of Director General CPWD applicable for Delhi including Noida, Gurgaon, Faridabad & Ghaziabad and for other places as issued under the authority of Zonal Chief Engineer, CPWD and base price of other materials issued by concerned Zonal Chief Engineer and as indicated in Schedule 'F'. 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 as indicated in Schedule 'F' shall be followed.

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

Adjustment for component of individual material

$$V = P \times Q \times ((CI - CI_0)/CI_0)$$

Where,

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

- P = Base Price of material as issued under authority of DG, CPWD or concerned Zonal Chief Engineer and as indicated in Schedule "F". For Projects and Original Works
- Q = Quantity of material brought at site for bonafide use in the works since previous bill excluding any such quantity consumed in the deviated quantity of items beyond deviation limit and extra/substituted item, paid/to be paid at rates derived on the basis of market rate under clause 12.2.

CIo = Price index for cement, steel reinforcement bars structural steel and POL as issued by the DG, CPWD and corresponding to the time of base price of respective material indicated in Schedule 'F'. For other items, if any, provided in Schedule 'F', All India Wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of

Industry and Commerce and corresponding to the time of base price of respective material indicated in Schedule 'F'.

CI = Price index for cement, steel reinforcement bars, structural steel and POL as issued under the authority of DG, CPWD for period under consideration. For other items, if any, provided in Schedule 'F', 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.

Note: (i) 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 updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work x stipulated period/tendered cost) shall be considered.

Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of Materials covered in this Clause. If updated stipulated date of completion as calculated on pro- rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

- (ii) If during progress of work or at the time of completion of work, it is noticed that any material brought at site is in excess of requirement, then amount of escalation if paid earlier on such excess quantity of material shall be recovered on the basis of cost indices as applied at the time of payment of escalation or as prevailing at the time of effecting recovery, whichever is higher.
- (iii) Cement mentioned wherever in this clause also includes Cement component used in RMC brought at site from outside approved RMC plants, if any.
- (iv) The date wise record of ready mix concrete shall be kept in a register and the cement consumption for the same shall be calculated accordingly.
- (v) If built-up steel items are brought at site from workshop, then the variation shall be paid for the structural steel up to the period when the built up item/finished product is brought at site.

Clause - 10CC

Payment due to Increase / Decrease in Prices/ Wages (excluding materials covered under clause 10 CA) 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. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or

less than 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 up to this quarter : (A)
 - (b) Gross value of work done up to 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 10 CA) fresh paid in this quarter : (D)
 - (e) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) recovered in this quarter : (E)
 - (f) Full assessed value of Secured Advance for which escalation 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/deviated quantities of items paid as per Clause 12 Based on prevailing market rates during this quarter: (J)

Then,
$$M = C+F+I-J$$

 $N = 0.85 M$

Cost of work for which escalation is applicable: W = N

- (iii) Components for materials (except cement, reinforcement bars, structural steel, POL or other materials covered under clause 10 CA) labour, etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'F'. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the contractors.
- (iv) The compensation for escalation for other materials (excluding cement, reinforcement bars, structural steel, POL or other materials covered under clause 10 CA) shall be worked as per the formula given below:-Adjustment for civil component (except cement, structural steel, reinforcement bars, POL and other materials covered under clause 10CA) / electrical component of construction 'Materials'

$$Vm = W \times (Xm/100) \times ((MI-MIo)/MIo)$$

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 10CC.

Xm = Component of 'materials' (except cement, structural steel, reinforcement bars POL and other materials covered under clause 10CA) expressed as percent of the total value of work.

MI = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/ Group Items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group Items. (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 updated stipulated date of completion considering the effect of extra work (extra time to be calculated on prorata basis only as cost of extra work x stipulated period/tendered cost, shall be considered.) If updated stipulated date of completion as calculated on pro- rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

Mlo = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/Group Items valid on the last stipulated date of receipt of tender including extension, if any, as published by the Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group items.

*Note: relevant component only will be applicable.

- 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 dates of preparation of bills as finally entered in the Measurement Book by the Assistant Engineer/ date of submission of bill finally by the contractor to the department in case of computerized measurement books shall be the guiding factor to decide the bills relevant to the quarterly interval. The first such payment shall be made at the end of three months after the month (excluding the month in which tender was accepted) and thereafter at three months' interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.
 - (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 the 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 Ml and Fl shall be the average of the indices for the months falling within that period.

vi) The compensation for escalation for labour shall be worked out as per the formula given below:-

$VL = W \times (Y/100) \times ((LI-LI_0)/LI_0)$

VL: Variation in labour cost i.e. amount of increase or decrease in rupees to be paid orrecovered.

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

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

LI : Minimum wage 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 wage prevailing on the last date of quarter previous to the quarter pertaining to updated stipulated date of Completion considering the effect of extra work (extra time to be calculated on prorata basis only as cost of extra work x stipulated period/tendered cost, shall be considered.) If updated stipulated date of completion as calculated on pro- rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

- Ll_O: 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 extension, if any.
- (i) The following principles will be followed while working out the compensation as per sub para (vi) above.
- (a) The minimum wage of an unskilled 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 due to increase in cost of materials 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 rates 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 Mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.
- (ii) 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 to time and the decision of the Engineer-in-Charge in this behalf shall be final and binding on the contractor.
- (iii) Provided always that:-
- (a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable but provisions of clause 10CA will be applicable.
- (b) Where provisions of clause 10CC are not applicable, provisions of clause 10C and 10CA will become applicable.

Note: Updated stipulated date of completion (period of completion plus extra time for extra work) for compensation under clause 10C, 10CA and 10 CC

The factor of 1.25 taken into account for calculating the extra time under clause 12.1 for extra time shall not be considered while calculating the updated stipulated date of completion for this purpose in clause 10C, clause 10CA, and clause 10CC.

Clause - 10D

Dismantled Material Govt. Property

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Government's property and such materials shall be disposed off to the best advantage of Government 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 the specifications. 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 Engineer-in-Charge 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 Engineer-in-Charge 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.

Clause - 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.

Clause – 12.2

Deviation, Extra Items and Pricing

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) submit market rate claim rates, supported by proper analysis which shall include invoices, vouchers etc. and Manufacturer's specification for the work failing which the rate approved later by the Engineer-in-charge shall be binding and the Engineer-in-Charge shall within prescribed time limit 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, failing which it will be deemed to have been approved.

In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following 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).

Deviation, deviated Quantities, Pricing

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within prescribed time limit of 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 (as per invoice, vouchers from the manufacturers or suppliers submitted by the agency and duly verified by Engineer in Charge or his representative) and the contractor shall be paid in accordance with the rates so determined.

The prescribed time limit for finalizing rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items is within 45 days after submission of proposal by the contractor without observation of the Engineer-in-Charge.

In case of decrease in the rates prevailing in the market of items for the work in excess of the limits laid down in Schedule F, the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

Clause – 12.3

The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

Clause – 12.4

For the purpose of operation of Schedule "F", the following works shall be treated as works relating to foundation unless & otherwise defined in the contract:

- (i) For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
- (ii) For abutments, piers and well staining: All works up to 1.2 m above the bed level.
- (iii) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/ tanks and other elevated structures: All works up to 1.2 meters above the ground level.
- (iv) For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 meters above the ground level.
- (v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
- (vi) For Roads, all items of excavation and filling including treatment of sub base.

Clause – 12.5

Any operation incidental to or necessarily has to be in contemplation of tenderer while quoting 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 or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer-in-Charge shall give notice in writing to that effect to the contractor stating the decision as well as the cause for such decision 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 did not derive in consequence of the foreclosure of the the works.

full but which he whole or part of

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 utilized 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) Government 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 Government shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by Government, cost of such materials as detailed by Engineer-in- Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- (iii) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- (iv) Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the Engineer- in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iii) and (iv) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the Government as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the Government from the contractor under the terms of the contract.

In the event of action being taken under Clause 13 to reduce the scope of work, the contractor may furnish fresh Performance Guarantee on the same conditions, in the same manner and at the same rate for the balance tendered amount and initially valid up to the extended date of completion or stipulated

date of completion if no extension has been granted plus minimum 60 days beyond that. Wherever such a fresh Performance Guarantee is furnished by the contractor the Engineer-in-Charge may return the previous Performance Guarantee.

Clause - 14

Carrying out part work at risk & cost of Contractor

If contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 working days in this respect from the Engineer-in-Charge; or
- (ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 working days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or
 - Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) 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.
- (iii) 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 possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
 - (b) Carry out the part work / part incomplete work of any item(s) 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 completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by Government 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 the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by Government in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law or per as 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, constructional plant, implements, temporary building 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 above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements 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 Engineer-in-Charge, (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 Engineer-in-Charge 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 Engineer in- Charge.

- (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 Engineer-in- Charge 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 Engineer-in- Charge 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 Engineer-in-Charge 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 Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer in- Charge 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 Government or where it affects whole of the works, as an abandonment of the works by Government, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by Government, 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 Engineer- in-Charge 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 Engineer-in-Charge 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 Engineer-in - charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the Department or any organization engaged by the Department for Quality Assurance and of 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 authorized subordinates in charge of the work or to the Chief Engineer in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskilful 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 twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) 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 authority specified in schedule 'F' 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 Engineer-in-Charge 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 defect liability 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 kerb, 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 or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer in- Charge 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 at his own expense or in default the Engineer-in-Charge cause the same to be made 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** (six months in the case of work costing Rs. Ten lakhs and below except road work) 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. Provided that in the case of road work, if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

Clause - 18

Contractor to Supply Tools & Plants etc.

The contractor shall provide at his own cost all materials, machinery, tools & plants as required. In addition to this, appliances, implements, other plants, 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 specifications 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 therefore 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 Workmen

In every case in which by virtue of the provisions sub-section (1) of section 12 of the Workmen's Compensation Act. 1923, Government is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Government will recover from the contractor, the amount of the compensation so paid: and without prejudice to the rights of the Government under sub-section(2) of section 12, of the said Act, Government 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 Government to the contractor whether

under this contract or otherwise. Government shall not be bound to contest any claim made against it under sub- section (1) of section 12, of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.

Clause 18B

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, Government 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 and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, Government 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 Government under sub-section(2) of Section 20, and subsection (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government 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 Government to the contractor whether under this contract or otherwise Government 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 Government full security for all costs for which Government might become liable in contesting such claim.

Clause - 19

Labour Laws to be complied by the Contractor

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 comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.

The contractor shall also abide by the provisions of the 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 Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

Clause - 19A

No labour below the age of fourteen years shall be employed on the work.

Clause - 19B

Payment of Wages

- (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (iv) (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
 - (b) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.
- (v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- (vi) The contractor shall indemnify and keep indemnified Government against payments to be made under and for the observance of the laws aforesaid and Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.
- (vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

- (viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- (ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

Clause 19C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty as decided by the authority mentioned in Schedule F for each default and in addition, the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 19D

The contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively:-

- (1) the number of labourers employed by him on the work,
- (2) their working hours,
- (3) the wages paid to them,
- (4) the accidents that occurred during the said for night showing the circumstances under which they happened and the extent of damage and injury caused by them, and
- the number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them.

Clause 19E

In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the Central Public Works Department and its contractors.

Clause 19G

In the event of the contractor(s) committing a default or breach of any of the provisions of the Central Public Works Department, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and' Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum as

decided by the authority mentioned in Schedule F for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to as decided by the authority mentioned in Schedule F per day for each day of default subject to a maximum of 5 percent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the C.P.W.D. Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the workpeople within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/ observe the said Rules and to provide the amenities to the workpeople as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and as per approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

CLAUSE 19H

The contractor(s) shall at his/their own cost provide his/their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

Clause 19I

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any

untoward action on the part of such labour.

CLAUSE 19J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer- in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy upto 5% of tendered value of work may be imposed by the Superintending Engineer whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, the SE/ Superintending Engineer cum Project Director/ Chief Engineer CPM cum ED through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

Clause 19K

Employment of skilled/semi skilled workers

The contractor shall, at all stages of work, deploy skilled/semi skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute/Industrial Training Institute/ National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer- in- Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate specified in schedule 'F' per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores.

For work costing more than Rs. 10 Crores, and upto Rs. 50 Crores, the contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 20% of the unskilled workers engaged in the project in co-ordination with the CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi skilled tradesmen.

For works costing more than Rs. 50 Crores, the contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 30% of the unskilled worker engaged in the project in co-ordination with the CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi skilled tradesmen. The cost of such training as stated above shall be born by the Government. The necessary space and workers shall be provided by the contractor and no claim what so ever shall be entertained.

Clause - 20

Minimum Wages Act to be Complied With

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed there under and other labour laws affecting contract labour that may be brought into force from time to time.

Clause – 21

Work not to be sublet. Action in case of in solvency

The contract shall not be assigned or sublet without the written approval of the Engineer-in- Charge. 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 person in the employ of Government 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 Engineer-in-Charge on behalf of the President of India shall have power to adopt the course specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

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 Government 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 Engineer-in- Charge 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 contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as 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

Life Cycle Cost

The contractor shall be responsible for safety, quality and soundness of the buildings including structural elements beyond maintenance period. The contractor shall have obligation to rectify such defects minimum up to 5 (five) years from the date of completion of work. The defects have to be rectified within a reasonable time not exceeding forty five days after issue of notice by Engineer- in- Charge. If contractor does not take corrective action within 45 days, then action for debarring of the agency shall be taken by the appropriate authority.

Clause - 25

Settlement of Disputes & Arbitration

- a. This shall be construed and governed by the Laws of the India.
- b. Any matter, which is not stipulated in the Agreement, shall be settled in good faith by discussion among the parties in a spirit of understanding and cooperation.

All local problems, disputes and conflicts whether with private, public and /or Government parties, must be sorted out at your end and it must be ensured by you that our work is not affected due to such occurrences. No additional cost will be claimed on account of this.

All disputes shall be referred under judication of Kokrajhar District only. The provisions of Indian Arbitration Act of 1996 shall apply.

Clause 28

Action where no Specifications are Specified

In the 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 Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications, if not available then as per state/ 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 30

Water for Works

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 following conditions.

- (i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.
- (ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory

Clause 31

Hire of Plant & Machinery

The contractor shall arrange at his own expense all tools, plant, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.

Clause - 32

Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees

(i) 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 name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. Even of the contractor (or partner(s) in case of firm/ company) is himself / herself an Engineers, it is necessary on the part of the contractor to Employ principal technical representative / technical representative (s).

The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) 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(s) 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(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-incharge 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(s) The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been

given to the contractor. The principal technical representative and other technical representative(s) 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 representative(s) 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/checked measurements/ test checked measurements. The representative(s) shall not 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(s) 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(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) 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 fails to appoint suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days 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(s) is/are 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(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on account bill/ final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

(ii) 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 - 33

Levy/Taxes payable by Contractor

- (i) GST, Building and other Construction Workers Welfare Cess or any other tax, levy or Cess in respect of input for or output by this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect except as provided under Clause 34.
- (ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Government of India and does not any time become payable by the contractor 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 Government of India 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 - 34

Conditions for reimbursement of levy/taxes if levied after receipt of Tenders

- (i) All tendered rates shall be inclusive of any tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs.
 - However, effect of variation in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease.
 - Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess.
 - Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition 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 and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.
- (iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, or variation or repeal of such 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 – 35

Termination of Contract on death of contractor

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-Charge on behalf of the Owner of India shall have the option of terminating the contract without levy of compensation to the contractor.

Clause – 36

If relative working in CIT Kokrajhar then the contractor not allowed to tender

The contractor shall not be permitted to tender for works in the CIT Kokrajhar responsible for award and execution of contracts in which his near relative is posted in any capacity in CIT Kokrajhar.

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

Clause - 37

No Gazetted Engineer to work as Contractor within one year of retirement

No engineer of gazetted rank or other gazetted officer employed in engineering or 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 38

Theoretical consumption of Material

- (i) After completion of the work and also at any intermediate stage in the event of Non reconciliation of materials issued theoretical quantity of materials used in the work shall be calculated on the basis and method given hereunder:-
 - (a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule 'F'. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid

down by the Engineer-in-Charge.

- (b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by Engineer-in- Charge, including authorized lappages, chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual, each diameter wise, section wise and category wise separately.
- (c) Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables, pig lead and G.I./M.S. sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces (except in the case of G.I./M.S. sheets it shall be 10%), such determination & comparison being made diameter wise & category wise.
- (d) For any other material as per actual requirements.

Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'For non scheduled items, the decision of the SE/ Superintending Engineer cum PD/ CE/ CPM cum ED regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor.

(ii) The said action under this clause is without prejudice to the right of the Government to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

Clause - 41

Release of Security deposit after labour clearance

Release of 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, on record 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 cannot 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 suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than ½ to 1(½ horizontal and 1 vertical.)
- 2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary 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 thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3. Working platforms, 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 m (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 90 cm. (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. (111/2") for ladder up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least ¼" for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm 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 defence 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. (a) Excavation and Trenching All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100

ft.) 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 1.5

m. (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 1.5 m. (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.

- (b) Safety Measures for digging bore holes:-
 - (i) If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
 - (ii) During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work;
 - (iii) Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all around the point of drilling to avoid entry of people;
 - (iv) After drilling the borewell, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
 - (v) After the completion of the borewell, the contractor should cap the borewell properly by welding steel plate, cover the borewell with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - (vi) After the borewell is drilled the entire site should be brought to the ground level.
- 7. Demolition Before any demolition work is commenced and also during the progress of the work,
 - (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (ii) 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.
 - (iii) 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 equipment 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 contractors shall ensure that the manhole covers 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 Senior Superintendent (Engg) / Junior Engineer (Civil) 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 off 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 shall 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 from 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 has 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 will 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 scrapped.
- (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.
- (vii) Workmen executing work on scaffolds or other structures above specified height shall be provided with full body harness and fall arresters.
- 9. An additional clause (viii)(i) of Central Institute of Technology Kokrajhar Code (vi) the Contractor shall not employ women and men 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:
 - a. White 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.
 - b. Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
- 10. When the work is done near any place where there is risk of drowning, all necessary equipment 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 attachments, anchorage and supports shall conform to the following standards or conditions:
 - a. (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.
 - b. 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.
 - c. 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.
- d. In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in- Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
- 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 energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as 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 at 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 of the department 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 Rule in force in the Republic of India.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARANGEMENTS FOR WORKERS EMPLOYED BY CIT KOKRAJHAR OR ITS CONTRACTORS

1. APPLICATION

These rules shall apply to all buildings and construction works in charge of CIT Kokrajhar in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. **DEFINITION**

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

- (i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
 - (a) For work places in which the number of contract labour employed does not exceed 50 –

Each first-aid box shall contain the following equipment:-

- 1. 6 small sterilised dressings.
- 2. 3 medium size sterilised dressings.
- 3. 3 large size sterilised dressings.
- 4. 3 large sterilised burn dressings.
- 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
- 6. 1 (30 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
- 7. 1 snakebite lancet.
- 8. 1 (30 gms.) bottle of potassium permanganate crystals.
- 9. 1 pair scissors.
- 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
- 11. 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.

- 12. Ointment for burns.
- 13. A bottle of suitable surgical antiseptic solution.
- (b) For work places in which the number of contract labour exceed 50 - Each firstaid box shall contain the following equipment:-
 - 1. 12 small sterilised dressings.
 - 2. 6 medium size sterilised dressings.
 - 3. 6 large size sterilised dressings.
 - 4. 6 large size sterilised burn dressings.
 - 5. 6 (15 gms.) packets sterilised cotton wool.
 - 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
 - 7. 1 (60 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
 - 8. 1 roll of adhesive plaster.
 - 9. 1 snake bite lancet.
 - 10. 1 (30 gms.) bottle of potassium permanganate crystals.
 - 11. 1 pair scissors.
 - 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.
 - 13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - 14. Ointment for burns.
 - 15. A bottle of suitable surgical antiseptic solution.
- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.

(viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- (i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- (ii) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- (iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- (iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- (i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- (ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- (iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- (i) Latrines shall be provided in every work place on the following scale namely:-
 - (a) Where female are employed, there shall be at least one latrine for every 25 females.
 - (b) Where males are employed, there shall be at least one latrine for every 25 males

Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be up to the first 100, and one for every 50 thereafter.

- (ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iii) Construction of latrines: The inside walls shall be constructed of masonry

- or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (iv) (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
 - (b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (v) There shall be at least one urinal for male workers up to 50 and one for female workers up to 50 employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 50 and one for every 100 or part thereafter.
- (vi) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
 - (b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (viii) Disposal of excreta: Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- (ix) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. (6 sqft.) per head.

Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. CRECHES

- (i) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19H (ii) a, b & c.
- (ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- (iii) The contractor shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the bed room.
- (iv) The contractor shall provide one ayaa to look after the children in the crèche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- (v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- (i) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- (ii) The canteen shall be maintained by the contractor in an efficient manner.
- (iii) The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- (iv) The canteen shall be sufficiently lighted at all times when any person has access to it.
- (v) The floor shall be made of smooth and impervious materials and inside walls shall be lime-washed or colour washed at least once in each year.
 - Provided that the inside walls of the kitchen shall be lime-washed every four months.
- (vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- (vii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- (viii) Suitable arrangements shall be made for the collection and disposal of garbage.
- (ix) The dining hall shall accommodate at a time 30 per cent of the contract

- labour working at a time.
- (x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one sq m (10 sq ft) per diner to be accommodated as prescribed in sub-Rule 9.
- (xi) (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
 - (b) Washing places for women shall be separate and screened to secure privacy.
- (xii) Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- (xiii) (a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment necessary for the efficient running of the canteen.
 - 2. The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.
 - (b) 1. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
 - 2 A service counter, if provided, shall have top of smooth and impervious material.
 - 3. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.
- (xiv) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- (xv) The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit, No loss' and shall be conspicuously displayed in the canteen.
- (xvi) In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-
 - (a) The rent of land and building.
 - (b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
 - (c) The cost of purchase, repairs and replacement of equipment including furniture, crockery, cutlery and utensils.
 - (d) The water charges and other charges incurred for lighting and ventilation.
 - (e) The interest and amounts spent on the provision and maintenance of equipment provided for the canteen.
- (xvii) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11. COVID-19 SAFETY MEASURES

All required measures and precautions to be observed and ensured by the contractor, as per latest guidelines issued by State/Central government.

12. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

13. AMENDMENTS

Government may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof.

CONTRACTORS' LABOUR REGULATIONS

1. SHORT TITLE

These regulations may be called the CIT KOKRAJHAR Contractors' Labour Regulations.

2. **DEFINITIONS**

- (i) **Workman** means any person employed by CIT Kokrajhar or its contractor directly or indirectly through a subcontractor with or without the knowledge of the CIT Kokrajhar to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person:-
 - (a) Who is employed mainly in a managerial or administrative capacity: or
 - (b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
 - (c) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.

No person below the age of 14 years shall be employed to act as a workman.

- (ii) Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
- (iii) **Contractors** shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
- (iv) **Wages** shall have the same meaning as defined in the Payment of Wages Act.
- 3. (i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
 - (ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.

- (iii) (a) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
 - (b) Where the minimum wages prescribed by the Central/State Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
 - (c) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

4. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

5. PAYMENT OF WAGES

- (i) The contractor shall fix wage periods in respect of which wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- (iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (vi) Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.
- (vii) All wages shall be paid through Bank or ECS or online transfer.

- (viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- (ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.
- (x) It shall be the duty of the contractor to ensure the disbursement of wages through bank account of labour.
- (xi) The contractor shall obtain from the Junior Engineer or any other authorised representative of the Engineer- in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:-

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- (i) The wages of a worker shall be paid to him without any deduction of any kind except the following:-
 - (a) Fines
 - (b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - (c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - (d) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - (e) Any other deduction which the Central Government may from time to time allow.
- (ii) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner

Note: An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-X

- (iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.

- (v) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- (vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

- (i) The contractor shall maintain a **Register of persons employed on work on contract** in Form XIII of the CL (R&A) Central Rules 1971 (Appendix IV)
- (ii) The contractor shall maintain a **Muster Roll register** in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- (iii) The contractor shall maintain a **Wage Register** in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- (iv) **Register of accident** The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:-
 - (a) Full particulars of the labourers who met with accident.
 - (b) Rate of Wages.
 - (c) Sex
 - (d) Age
 - (e) Nature of accident and cause of accident.
 - (f) Time and date of accident.
 - (g) Date and time when admitted in Hospital,
 - (h) Date of discharge from the Hospital.
 - (i) Period of treatment and result of treatment.
 - (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
 - (k) Claim required to be paid under Workmen's Compensation Act.
 - (1) Date of payment of compensation.
 - (m) Amount paid with details of the person to whom the same was paid.
 - (n) Authority by whom the compensation was assessed.
 - (o) Remarks
- (v) The contractor shall maintain a **Register of Fines** in the Form XII of the CL (R&A) Rules 1971 (Appendix-XI)
 - The contractor shall display in a good condition and in a conspicuous place of work the **Approved list of acts and omissions** for which fines can be imposed (Appendix-X)
- (vi) The contractor shall maintain a **Register of deductions for damage or loss** in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
- (vii) The contractor shall maintain a **Register of Advances** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII)
- (viii) The contractor shall maintain a **Register of Overtime** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)

8. ATTENDANCE CARD-CUM-WAGE SLIP

- (i) The contractor shall issue an **Attendance card-cum-wage slip** to each workman employed by him in the specimen form at (Appendix-VII)
- (ii) The card shall be valid for each wage period.
- (iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- (iv) The card shall remain in possession of the worker during the wage period under reference.
- (v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- (vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. EMPLOYMENT CARD

The contractor shall issue an **Employment Card** in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-VIII).

10. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a **Service certificate** in Form XV of the CL (R&A) Central Rules 1971 (Appendix-IX).

11. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of Urban Development in this behalf.

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The Labour Officer or any person authorised by Central Government on their behalf shall have power to make enquires with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or subcontractor in regard to such provision.

13. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer-in-Charge concerned indicating the extent, if any, to which the default has been committed

with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer-in-Charge after the Appointing Authority has given his decision on such appeal.

(i) The Engineer-in-Charge shall arrange payments to the labour concerned within 45 days from the receipt of the report form the Labour Officer or the Appointing Authority as the case may be.

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Engineer-in-Charge concerned within 30 days from the date of decision, but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by:-
 - (a) An officer of a registered trade union of which he is a member.
 - (b) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
 - (c) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- (ii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by:-
 - (a) An officer of an association of employers of which he is a member.
 - (b) An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
 - (c) Where the employers is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorised by the Central Government on his behalf.

17. SUBMISSIONS OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

18. AMENDMENTS

The Central Government/CIT Kokrajhar may from time to time add to or amend the regulations and on any question as to the application/Interpretation or effect of those regulations the decision of the Appointing Authority/Engineer-in-Charge concerned shall be final.

परिशिष्ट / Appendix 'I' प्रसूति प्रसुविधायों का रजिस्टर (ठेके की शर्तों का खंड १९-च) REGISTER OF MATERNITY BENEFITS (Clause 19F)

ठेकेदार का नाम और पता Name and address of the contractor
 कार्य का नाम और स्थिति
Name and location of the work

कर्मचारी का विवरण				
		etails of the emp	<u>oloyee</u>	
कर्मचारी का	पिता / पति का नाम	नियोजन का	वास्तविक	तारिख जिसको
नाम		स्वरुप	नियुक्ति की	प्रसवावस्था की सूचना
	Father's/husband's	Nature of	अवधी	दी गयी
Name of the	name	employment	Period of	Date of which notice
employee			actual	of confinement
			employment	given
1	2	3	4	5

	तारिख जिसको प्र Date on which ma	सूति छुट्टी प्रारम्भ हुः ternity leave comr		
प्रसव / गर्भपात	प्रसव की	दिशा में	गर्भपात क	र्ग दशा में
की तारिख	In case of	<u>delivery</u>	In case of n	<u>niscarriage</u>
Date of delivery	प्रारम्भ हुई	समाप्त हुई	प्रारम्भ हुई	समाप्त हुई
/ miscarriage	Commenced	Ended	Commenced	Ended
6	7	8	9	10

		वारी को संदत्त छुट्टी pay paid to the en		
प्रसव की दशा में <u>In case of delivery</u> छुट्टी वेतन की दर संदत्त रकम Rate of leave Amount paid		गर्भपात की दशा में In case of miscarriage छुट्टी वेतन की दर संदत्त रकम Rate of leave Amount paid		- टिप्पणियां Remarks
pay 11	12	pay 13	14	15

परिशिष्ट / Appendix 'II'

केंद्रीय प्रौद्योगोकि संस्थान कोकराझार संकर्मो में ठेकेदारों के श्रमिकों को अनुज्ञेय प्रसूति प्रसुविधा के बारे में रजिस्टर का नमूना प्रारूप

SPECIMEN FORM OF THE REGISTER, REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR IN CENTRAL INSTITUTE OF TECHNOLOGY KOKRAJHAR WORKS.

ठेकेदार का नाम और पता
Name and address of the contractor
कार्य का नाम और स्थिति
Name and location of the work

स्त्री का नाम और उसके पति का नाम

1. Name of the woman and her husband's name.

पद नाम

2. Designation.

नियुक्ति की तारिख

3. Date of appointment.

मॉस और वर्षों सहित वह तारिख जिसको उसे नियुक्त किया गया

4. Date and months and years in which she was employed.

सेवामुक्त / पदचयुक्त किये जाने की तारिख, यदि कोई हो

5. Date of discharge/dismissal, if any.

गर्भ धारण के बाबत प्रमाण पत्र पेश किये जाने की तारिख

6. Date of production of certificates in respect of pregnancy.

वह तारिख जिसको स्त्री प्रत्याशित प्रसव के बारे में इत्तेला देती है

7. Date on which the woman informs about the expected delivery.

प्रसव / गर्भपात / मृत्यु होने की तारिख

8. Date of delivery/miscarriage/death.

प्रसव / गर्भपात सम्बन्धी प्रमाण पत्र दिए जाने की तारिख

9. Date of production of certificate in respect of delivery/miscarriage.

प्रत्याशित प्रसव से पूर्व संदत्त प्रसूति / मृत्यु प्रसुविधा की रकम और उसकी तारिख

10. Date with the amount of maternity/death benefit paid in advance of expected delivery.

प्रसूति प्रसुविधा के पश्चातवर्ती संदाय की रकम और उसकी तारिख

11. Date with amount of subsequent payment of maternity benefit.

स्त्री के मृत्यु के बाद उसकी प्रसूति प्रसुविधा का संदाय प्राप्त करने के लिए उस स्त्री द्वारा नाम निर्देशित व्यक्ति का नाम

12. Name of the person nominated by the woman to receive the payment of the maternity benefit after her death.

यदि महिला की मृत्यु हो जाती है तो उसकी मृत्यु की तारिख, उस व्यक्ति का नाम, जिसको प्रसूति प्रसुविधा की रकम संदत्त की गयी, संदाय की तारिख और मास

13. If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month thereof and the date of payment.

रजिस्टर की प्रविष्टियां को अधिप्रमाणित करते हुए ठेकेदार के हस्ताक्षर

14. Signature of the contractor authenticating entries in the register.

निरीक्षक ऑफिसर के उपयोग के लिए टिप्पणी स्तम्भ

15. Remarks column for the use of Inspecting Officer.

श्रम बोर्ड LABOUR BOARD

कार्य का नाम				
Name of work				
े ठेकेदार का नाम				•••••
Name of Contractor				
े ठेकेदार का पता				
Address of Contractor				
केंद्रीय प्रौद्योगोकि संस्थान कोकराइ	आर का पता		•••••	
Name and address of CIT Kokra	•			
 केंद्रीय प्रौद्योगोकि संस्थान कोकराइ	 प्रार के श्रम अधिक	 गरी का नाम		
Name of CIT Kokrajhar Labour	•			
 केंद्रीय प्रौद्योगोकि संस्थान कोकराइ	के श्रम अधिक	 जरी का पता		
Address of CIT Kokrajhar Labo	•			
श्रम कार्यान्वयन अधिकारी का नाम				
Name of Labour Enforcement C				
 श्रम कार्यान्वयन अधिकारी का पता				
Address of Labour Enforcement				
	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
		• 		

क्रम संख्या	श्रेणी	न्यूनतम	भुगतान की	वर्तमान संख्या	टिपण्णी
Sl. No.	Category	निर्धारित मजदूरी Minimum Wage fixed	गयी वास्तविक मजदूरी Actual Wage paid	Number present	Remarks

साप्ताहिक छुट्टी Weekly holiday

मजदूरी की अवधी Wage Period मजदूरी के भुगतान की तारीख Date of payment of wages

काम के घंटे Working hours आराम का मध्यांतर Rest interval

परिशिष्ट / Appendix TV

फार्म 13 Form-XIII (कृप्या नियम 75 देखें) (See Rule 75)

ठेकेदार द्वारा लगावे गए मजदूरों का रजिस्टर Register of Workmen Employed by Contractor

ठेकेदार का नाम व पता...

Name and address of establishment under which contract is carried on कार्योलय का नाम व पता जिसके अधीन ठेका चल रहा है मुख्य नियोक्ता का नाम व पता Name and address of Principal Employer Name and address of contractor Nature and location of work कार्य का स्वरूप व स्थान

lan.	1 1	Artific) Appendi
(Pund) Remarks	22	
erenten seyh sh streny Reasons For Lor Lor Lor Lor	=	
Havit it wranter werk in exchara Date of termination of employment	9	
Hongy of Institute / Jung His Plems Separature or thumb impression of the workman	· en	
नीमरी अव्दर्भ होने की सारीख Date of Commence- ment of employment	.00	
earths uni		
भण्डूर का भागी. युव प्रका (नार प तावरील कालुक और दिवत) Permanent home address of the workman (Wilage and Teles), Takia and District)	e e	
and as well, or at my Nature of employment designation	10	
Fam / utili ass vers father's Husband's name	*	
F F F F F F F F F F F F F F F F F F F	м	
Harge an era Name and Sumame of workman	2	
N 15 H	_	

6 .		परिशिष्ट / Appendi	X T
Remarks	9		
	Ī	40	
E 1	.5	4	
(Rathra Dates		ra .	
		rv.	
		-	
Forber's Place spanners	*		
E A	m		
Name of Workman	2		
A. No	-		

फार्म 17 Form-XVII (क्र्यमा नियम 78 (2)(क) देखे) (See Rule 78(2)(a)) मजद्रशे रजिस्टर Register of wages

Name and address of contractor कार्यालय का नाम व पता जिसके अधीन ठेका पल रहा है Name and address of establishment under which contract is carried on कार्य का स्वरूप व स्थान

Nature and location of work

Monthly/Fortnight मजदूरी की अवधि: मासिक या पाक्षिक wages Period: Monthly/Forth

thistory season und schild the season under contractor on his national materials of contractor on his representative		91	
	FOREST TO SENT TO SEN	91	
	भूगवान मूद्र पृथ्व प्रवि Nei Antouri paid	24	
	नमूती, पदि नोत्री हो (पण्डाती का क्रमार दिखी Deductions है any (nodicate nature)	£2	
	Total	12	
484 arnad	अन्य नक्षद भूगवान के स्पन्न क्षित Other cash payments (hodicate nature)	E	
मी गई मशदूरी की रक्त Ampunt of wages earned	सम्प्रति	01	
Ampunt Ampunt	TIETE WITH DESCRIPTION ABOVENCES	iai	
	कून भागपुरी Basic wages		
	reagh ab cv/firr te Daty rate of wagest piece rate		
	Rey rry and st tytes Units of work done	10	
	Greet Re- end float No. of days. worked	so.	
Rey my wind ser sussey/ upperson Designation/ Instant of work-done		*	
	शत्रद्धी सं विनस्त्य में इस मंद्रवा Sena No. in the nop- ister of workman	en en	
	Hars all	N	
	75 No.	-	٦

ठेकटार का नाम ठ पला	Torget also wage Card	
Name and address of contractor	Date of Issue	
कार्यका नाम व रचान	ומ	
Name and location of work	Designation	
मजदूर का नाम	和份/中部	
Name of workman	Month/Fortnight	
मणदूरी की दर Rate of Wages		
1234567891011	12 13 14 15 16 17 18 19 20 21 22 23 24 2	25 26 27 28 29 30 31
NAT		25
Morning		Rate
FELEN		
Complete		4494
Ewel mg		Amount
हरताक्षार		
Initial		
	में अपनी मजदूरी के	क्षये प्रापा किए
Received from	the sum of Rs.	on account of my wages
यह मजदूरी कार्ड जारी होने की तारीख से एक मास तक के लिए वैध है।		हस्तासर Signature,

फार्म 19/Form-XIX

(कृप्या नियम 78(2)(ख) देखें) [See rule 78 (2)(b)]

मजदूरी कार्ड Wages Slip

डे व	हेदार का नाम व पता
Na	ame and address of contractor
म्	ब्दूर का नाम तथा उसके पिता ∕ पति का नाम
Na	me and Father's/Husband's name of workman
	यें का स्वरूप तथा स्थान का नाम
Na	sture and location of work
सप	ताह / पक्ष / मास के लिए
Fo	r the Week/Fortnight/Month ending
1.	जितने दिन कार्य किया
	No. of days worked
2.	किए गए कार्य के एककों की संख्या (पीस रेट मजदूरों के बारे में)
	No. of units worked in case of piece rate workers
3.	
	Rate of dailly wages/piece rate
4.	समयोपरि मजदूरी की रकम
	Amount of overtime wages
5.	दी जाने वाली कुल एकम
	Gross wages payable
6.	यसूलियां, यदि कोई हो
	Deduction, if any
7.	दी गई मजदूरी की मुद्ध रकम
	Net amount of wages paid

ठेकेदार अथवा उसके प्रतिनिधि के हस्तासर Initials of the contractor or his representative

फार्म 14 / Form-XIV (कृप्या नियम 76 देख) [See rule 76]

रोजगार कार्ड Employment Card

	केदार का नाम व पता ame and address of contractor
ক্য	र्यालय का नाम व पता जिसके अधीन ठेका चल रहा है ame and address of establishment under which contract is carried on
क	ार्यं का नाम व स्थान ame of work and location of work
मुर Na	व्य नियोक्ता का नाम व पता ame and address of Principal Employer
	मजदूर का नाम Name of the workman
2	लगाये गए मजदूरों के रजिस्टर में क्रम संख्या SI. No. in the register of workman employed
3.	रोजगार / पद का नाम Nature of employment/designation
4,	मजदूरी की दर (पीस वर्क के बारें में एकक के ब्यौरा सहित) Wage rate (with particulars of unit in case of piece work)
5.	मजदूरी की अवधि Wage period
6.	रोजगार की अवधि Tenure of employment
7.	

ठेकेदार के हस्ताक्षर Signature of contractor

हरसासर / Signature

फार्न 15 Form-XV (कृपया नियम 77 देखें) (See Rule 77) सेवा प्रमाणपत्र Service Certificate

Name and address of establishment in under which contract is carried on कायीलय का नाम व पता जिसके अधीन ठेका घल रहा है. Name and address of Principal Employer मुख्य नियोक्ता का नाम और पता. Name and address of contractor Name and address of workman कार्य का स्वरूप तथा स्थान Nature and location of work Father's/Husband's name ठेकेदार का नाम व पता... मजदूर का नाम व पता. आयु अधया जन्म तिथि. Indentification marks विद्या/पति का नाम. Age or date of birth पहचाम विन्ह

erks.	9	
1) टिप्पणी Remarks		
किए गए कार्य का स्थलम मजदूरी दर (पीस वर्क के मामलें में एकक के ब्योरों सहित) Nature of Work Done Rate of wages (with particulars of unit in case of piece work)	ND.	
किए गए कार्य का स्वरूप Nature of Work Done	4	
अवधि which employed तक To	en:	
रोजगार की कुल Total Period for w से From	2	
AF SST. No.	-	1

परिशिष्ट / Appendix 'X' LIST **O**F **A**CTS **A**ND **O**MISSIONS FOR **W**HICH FINES CAN **B**E **I**MPOSED ऐसे कार्यों तथा भूलों की सूची जिसके लिए जुर्माने किये जा सकते हैं

केंद्रीय प्रौद्योगोकि संस्थान कोकराझार ठेकेदार श्रमिक विनियमों के नियम 7 (v) के अनुसार कार्य स्थल पर अंग्रेजी तथा स्थानीय भाषा दोनों में अच्छी प्रकार से प्रदर्शित किया जाना।	In accordance with rule 7(v) of the CIT Kokrajhar Contractor's Labour Regulations to be displayed prominently at the site of work both in English and local language
जानबूझ कर अकेले या अन्य के साथ मिल कर अवज्ञा या उल्लंघन।	Wilful insubordination or disobedience, whether alone or in combination with other.
केंद्रीय प्रौद्योगोकि संस्थान कोकराझार के कार्य या सम्पति के अतिरिक्त, ठेकों के सम्बन्ध में चोरी धोखाबाजी, बेईमानी करना।	2. Theft fraud or dishonest in connection with the contractors beside a business or property of CIT Kokrajhar.
घूस या अन्य गैरकानूनी परितोषण लेना या देना।	3. Taking or giving bribes or any illegal gratification.
नित्य देर से आना।	4. Habitual late attendance.
शराब पीकर लड़ना, उपद्रवी या बेढंगा या अन्यमनस्क व्यवहार।	Drunkenness fighting, riotous or disorderly or indifferent behaviour.
नित्य लापरवाही।	6. Habitual negligence.
उस छेत्रों के आस-पास बीड़ी-सिगरेट पीना जहाँ आग पकड़ने वाली या अन्य सामग्री रखी हो।	7. Smoking near or around the area where combustible or other materials are locked.
नित्य अनुशासनहीनता।	8. Habitual indiscipline.
चालू कार्य में अथवा केंद्रीय प्रौद्योगोकि संस्थान कोकराझार या ठेकेदार की सम्पति को क्षति पहुँचाना।	9. Causing damage to work in the progress or to property of CIT Kokrajhar.
ङ्यूटी पर सोना।	10. Sleeping on duty.
कामचोरी या कार्य को धीरे करना।	11. Malingering or slowing down work.
नाम, आयु, पिता के नाम आदि के बारे में गलत	12. Giving of false information regarding

सूचना देना।	name, age, father's name, etc.
नियोक्ता द्वारा दिये गये मजदूरी कार्ड को नित्य खो देना।	13. Habitual loss of wage cards supplied by the employers.
मालिक की उत्पादन की सम्पत्ति का अनिधकृत उपयोग या कार्यस्थल पर अनाधिकृत वस्तुएं बनाना।	14. Unauthorised use of employer's property of manufacturing or making of unauthorised articles at the work place.
कुशल कामगारों द्वारा निर्माण तथा अनुरक्षण में अकुशल कारीगरी दिखाना जिसे विभाग स्वीकार नहीं करता जिसके संशोधन के लिये ठेकेदार को बाध्य किया जाता है।	15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Department and for which the contractors are compelled to undertake rectifications.
गलत शिकायतें लगाना और / या भ्रामक विवरण देना।	16. Making false complaints and/or misleading statements.
स्थापनाओं के परिसर को भीतर कोई व्यापार चलाना।	17. Engaging on trade within the premises of the establishments.
कर्मचारियों का अनधिकृत व्यापार कार्य करना।	18. Any unauthorised divulgence of business affairs of the employees.
स्थापना के परिसर के भीतर किसी प्रकार का धन एकत्र करना या उसके लिए प्रचार करना जब तक कि मालिक द्वारा अधिकार न दिया गया हो।	19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorised by the employers.
मालिकों की पूर्व अनुमति के बिना परिसर के भीतर बैठकें बुलाना ।	20. Collection or canvassing for the collection of any money within the premises of an establishment unless authorised by the employers.
परिसर के भीतर कार्य समय के दौरान किसी कामगार या कर्मचारी को डराना या धमकाना ।	21. Threatening or intimidating any workman or employer during the working hours within the premises.

परिशिष्ट / Appendix 'XI'

फार्न 12 Form-XII (कृषया नियम 78(2)ध) देखें) (See Rule 78(2) (d))

जुर्मानों का रजिस्टर Register of Fines

Name and address of establishment in under which contract is carreid on कार्योक्त्य का नाम व पता जिसके अधीन ठेका चल रहा मुख्य नियोक्ता का नाम व पता Name and address of Principal Employer Name and address of contractor Nature and location of work वेकेदार का नाम य पता कार्य का स्वरूप व स्थान

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श्रम क्रमंद्राप्त ने श्रिम क्रमंत्री के श्रिम्द कोई श्राप्त श्रम्मा है Whether workman shewed cause against fine	7	
	9	
The state of the second of second or	2	
rfarê en even./ norim. Designationi nature of employment	4	
निता/पटी का नाम Father's/Husband's Name	m	
Harty at 4th	2	
単数	-	

फार्म 20 Form-XX (कृपया नियम 78(2)श) देखें) (See Rule 78(2) (d))

सति / हानि के लिए कटौती का स्जिस्टर Register of Deduction for Damage or Loss

Name and address of establishment in under which contract is carreid on कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है मुख्य नियोक्ता का नाम व पता Name and address of Principal Employer Name and address of contractor Nature and location of work ठेकेदार का नाम व पता ... कार्य का स्वसंप व स्थान

	Remarking	13	
बसूती की तिथि Date of recovery	Per	12	
बसूती की तिथि Date of secove	Stoph Sheet First Fresh	F	
विस्तु भी	Rest No.of installments	10	
and no	offt Amount of deduction imposed	on .	
एस व्यक्ति धर मान जिस्तारी उपलेबाति में इन्देशाती की व्याचना	जुनी गई name of person in whose presence employee's explanation was heard	80	
क्षण कर्नवरूप मे इस कटीटी से विष्ट्य कोई	D	7	
	edy in ruffe eff aff refra Parkulars Date of of damage damage or less or kess	9	
व्यति अधवा	erP en uther Particulars of damage or less	S	
्रीकरी वा प्रस्था/	utrania Designation/ nature of employment	4	
	Name of Workman Father's/Husbasend	8	
	Hongs an imm	2	
×	S. N. N.	-	

परिशिष्ट / Appendix 'XII'

फार्म 22 Form-XXII (क्पया नियम 78(2)घ) पेखी (See Rule 78(2) (d))

अधिम का रजिस्टर Register of Advances

Natu	कार्य का स्वरूप व स्थान Nature and location of work	of establishmer स्थान of work	Name and address of establishment in under which contract is carreid on कार्यका करवान	ch contract is c	carreid on				
Nam	मुख्य नियोक्ता का नाम य पता Name and address of Principal En	मुख्य नियोक्ता का नाम य पता Name and address of Principal Employer	ployer					İ	
21 PE		सम्बद्ध का शहर निवार/पाठे का नाम Name of workman Father's/ Husband name	dash az essal/ genn Desgraton nature of employment	सम्पूरी पर अमृष्टि रोगा देश मज्जूरी Wage Period and wages perjable	for an arthur of Sife me office of advance given	te saltan forme for after Perposes, for salects attence made	Rent of eten Ricus and it Alcour and it Aureor of estallments by which advances to be regard	about the same at the same and the same at the same at the same at the same are the same and the same are to same as the same are to same are to same as the same are to same	at fifth afficial and
-	64		*	10	10	-	30	on .	9

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फार्म 23 Form-XXIII (क्यया नियम ७६(२)(च) देखें) (See Rule 78(2) (e))

समयोपरि शींगस्टर Register of Overtime

Name and address of establishment in under which contract is carreid on कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है मुख्य नियोक्ता का नाम व पता Name and address of Principal Employer Name and address of contractor Nature and location of work कार्य का स्वरूप व स्थान ठेकेदार का नाम व पता

Remarks	12	
जिस रह पर सम्प्रोपी नगर्हे से हितार का भीता कार्याता paid	11	
mestyll sperg Overtens nameng	10	
HHRUR Hungh of tr Overtimo nite of suges	6	
anigh at implicati Normal rate of wages	100	
कुल सम्बोधित कार्य अवाद पीता कि के बाता से उत्पादन Total creative method or production in case of pace cased	7	
Gave mithalf with metalful from a metalful from a finish on walkely overstone weakest	9	
-flait as sent/ steps Designation nature of employement	sn.	
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Appendix - XV

PROFORMA FOR INDENTURE FOR SECURED ADVANCES

(For use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time)

WHEREAS by an agreement dated...... (hereinafter called the said agreement) the Contractor has agreed AND WHEREAS the Contractor has applied to the Owner that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the Owner t has agreed to advance to the Contractor the sum of Rupees on the security of materials the quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the Running Account Bill for the said works signed by himself the option of making any further advance or advances on the security of other materials brought by the Contractor to the site of the said works. Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupeeson or before the execution of these presents paid to the Contractor by the Owner (the receipt whereof the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the Contractor doth hereby covenant and agree with the Owner and declare as follows: -

- (1) That the said sum of Rupeesso advanced by the Owner to the Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
- (2) That the materials detailed in the said Account of Secured Advances which have been offered to and accepted by the Owner as security are absolutely the Contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the Owner against all claims to any materials in respect of which an advance has been made to him as aforesaid.

- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Department Officer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Department Officer.
- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Department Officer or an officer authorised by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the Owner of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Owner will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Owner shall immediately on the happening of such default be repayable by the Contractor to the Owner together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the Owner in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Owner to repay and pay the same respectively to him accordingly.
- (a) Size and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as if he had carried

it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay same to the Owner on demand.

- b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the Owner under these presents and pay over the surplus (if any) to the Contractor.
- (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be finally resolved as per provisions of clause 4.8 of the contract.

In witness whereof the said
Signed, sealed and delivered by the said contractor in the presence of
Signature
Witness Name
Address
Signed by
by the order and direction of the Owner in the presence of
Signature
Witness Name

Address

APPENDIX - XVI

FORM OF APPLICATION BY THE CONTRACTOR FOR SEEKING EXTENSION OF TIME

- 1. Name of contractor
- 2. Name of work as given in the agreement
- 3. Agreement no
- 4. Estimated amount put tender CON 297 Page 27
- 5. Date of commencement of work as per agreement
- 6. Period allowed for completion of work as per agreement
- 7. Date of completion stipulated in agreement
- 8. Period for which extension of time if has been given by authority in Schedule 'F' previously

letter no. and date	Extension granted	
	Months	Days
(a) 1st extension		
(b)2nd extension		
(c) 3rd extension		
(d)4th extension		
(e) Total extension previously given		

- 9. Reasons for which extension have been previously given (copies of the previous applications should be attached)
- 10. Period for which extension if applied for
- 11. Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last (for causes under clause 5.2/ and 5.3).

Submitted to the Authority indicated in Schedule F With copy to the Engineer-incharge and Sub Divisional Officer

	Signature of Contractor
Dated	

APPENDIX - XVII NOTICE FOR APPOINTMENT OF ARBITRATOR

To

The Registrar

Central Institute of Technology Kokrajhar,

Dear Sir/Madam,

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

- 1. Name of applicant
- 2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
- 3. Full address of the applicant
- 4. Name of the work and contract number in which arbitration sought
- 5. Name of the Division which entered into contract
- 6. Contract amount in the work
- 7. Date of contract
- 8. Date of initiation of work
- 9. Stipulated date of completion of work
- 10. Actual date of completion of work (if completed)
- 11. Total number of claims made
- 12. Total amount claimed
- 13. Date of intimation of final bill (if work is completed)
- 14. Date of payment of final bill (if work is completed)
- 15. Amount of final bill (if work is completed)
- 16. Date of appeal to you
- 17. Date of receipt of your decision.

Specimen signatures of the applicant

(only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

- 1. We have exhausted provision of DRC as per clause 25 of this agreement.
- 2. Statement of claims with amount of claims. 3.

4.

5.

Yours faithfully,

(Signatures)

Copy in duplicate to: The Chief Project Engineer, CIT Kokrajhar.

APPENDIX - XVIII

Form of Earnest Money Deposit Bank Guarantee Bond

contra	actor")	, contractor(Name of con has submitted his tender dated (name of work) ((date) for the construction of
bank) Bank' Execu	havin ") are itive E	L PEOPLE by these presents that we gour registered office at	
paym	ent we	ell and truly to be made to the said I ccessors and assigns by these presents	Engineer-in- Charge the Bank bind
SEAL	LED wi	ith the Common Seal of the said Bank	this day of 20.
THE	COND	DITIONS of this obligation are:	
(1) OR	of va Form (a)	er tender opening the Contractor with alidity of tender (including extended of Tender; If the contractor having been notified the Engineer-in-Charge: fails or refuses to execute the Form o Instructions to contractor, if required;	validity of tender) specified in the d of the acceptance of his tender by f Agreement in accordance with the
OK	. ,	fails or refuses to furnish the Performar provisions of tender document and Inst	· ·
therece having Charg	of upong to suge will	ke to pay to the Engineer-in-Charge ein receipt of his first written deman ubstantiates his demand, provided the note that the amount claimed by his is y of the above conditions, specifying the	d, without the Engineer-in-Charge at in his demand the Engineer-induction due to him owing to the occurrence
for such as such the En	bmissi ch deac nginee demand	ttee will remain in force up to and inclusion of tender dline is stated in the Instructions to concr-in- Charge, notice of which extension in respect of this Guarantee should	ntractor or as it may be extended by on(s) to the Bank is hereby waived.
	ess		Signature of the Bank Seal
*Date	-	Name and Address) worked out on the basis of validity pander	period of 6 months from last date of

** (Applicable only if mentioned in NIT)**

APPENDIX - XIX Form of Performance Security (Guarantee) Bank Guarantee Bond – Format - I

In consideration of the President of India (hereinafter called "The Government" having offered to accept the terms and conditions of the proposed agreement between
1. We,
2. We,
3. We, the said bank further undertake to pay the Government any money sign demanded notwithstanding any dispute or disputes raised by the contractor(s) in an 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,
5. We,

extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said 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 revoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid up to
Dated theday offor(indicate the name of the Bank)

APPENDIX - XX

Form of Performance Security (Guarantee) Bank Guarantee Bond - Format - II

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between
called "the said Contractor(s)") for the work
(Rupees
1. We,
2. We,
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,
5. We,

extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said 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,
8. This guarantee shall be valid up to
Dated theday offor(indicate the name of the Bank)

APPENDIX - XXI PROFORMA FOR MANDATORY TESTS TO BE ATTACHED WITH RUNNING ACCOUNT BILLS

Name of Work					• • • • • • • • • • • • • • • • • • • •				
Contract Agreement No. and Date				R/A Bill No					
Sl.	Item	Quantities as	Frequency as per	No. of tests	Up to date	No. of tests	No. of tests	Remarks	
No.		per Agreement	specification	required	quantity	required	actually done		
1	2	3	4	5	6	7	8	9	

Note: If the number of tests done are less than required, then reasons shall be recorded.

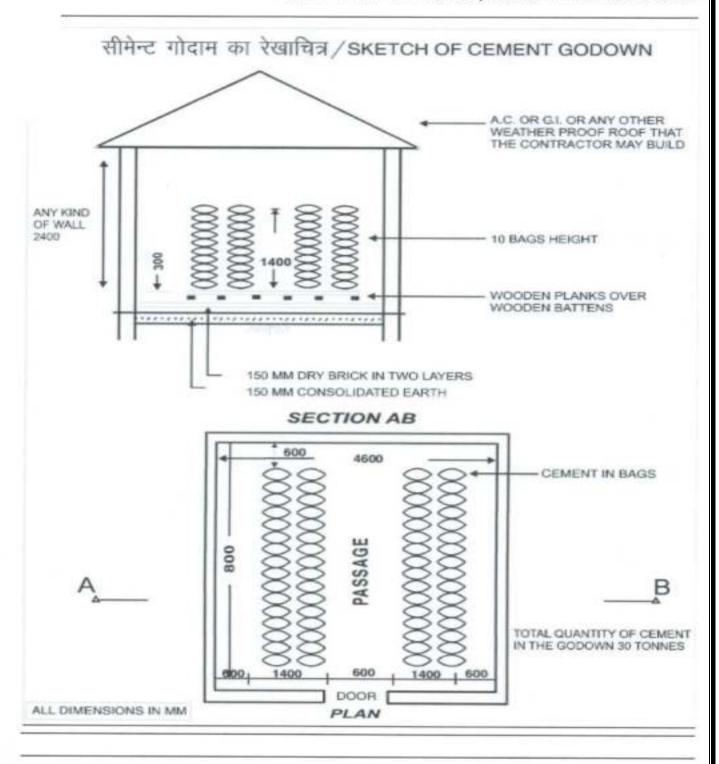
Signature of Assistant Engineer/Junior Engineer

Signature of Contractor

Signature of Engineer-in-Charge

APPENDIX - XXII

सीमेंट गोदाम का रेखाचित्र/Sketch of Cement Godown



TYPICAL SKETCH FOR CEMENT GODOWN

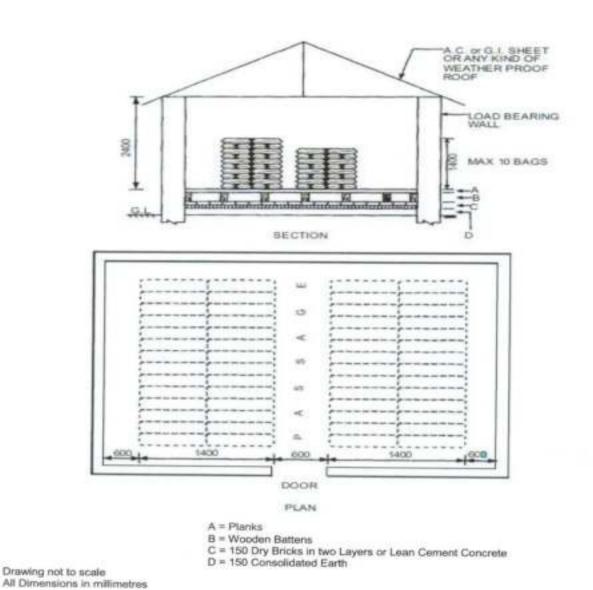


Fig. 1.1: Typical Arrangement in Cement Godown

PROFORMA OF SCHEDULES

(Separate Performa for Civil, Elect. & Hort. Works in case of Composite Tenders)

SCHEDULE 'A'

Schedule of quantities (Bill of Quantities)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

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

SCHEDULE 'C'

Tools and plants to be hired to the contractor:

Description	Hire charges per day	Place of issue
2	3	4
	Description 2	Description Hire charges per day 2 3

SCHEDULE 'D'

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

SCHEDULE 'E'

Reference to General Condi	tions of contract.	
Name of work:		
Estimated cost of work:	Rs	
i) Earnest money:	Rs after receiving performance gua	\
ii) Performance Guarantee iii) Security Deposit	5% of tendered value.5% of tendered value.	

Or

5% of tendered value plus 50% of PG for contracts involving maintenance of the building and services/ other work after construction of same building and services/ other work.

	RAL RULES: Officer inviting tender ECTIONS	
	num percentage for quantity of items of work be determined in accordance with Clauses 12.	•
Defini	tions:	
2(v)	Engineer-in-Charge	
2(viii)	Accepting Authority	
2(x)	Percentage on cost of materials and labour to cover all overheads and profits.	15%
2(xi)	Standard Schedule of Rates	
2(xii)	Department	
9(ii)	Standard CPWD contract Form GCC 2019, CPWD Form 7/8 as modified & corrected up	pto
Clause	e 1	
(i) (ii)	Time allowed for submission of Performa (Time and progress)and applicable labour ESIC and BOCW welfare board or proof of of from the date of issue of letter of accepta Maximum allowable extension with late for Guarantee amount beyond the period provide (1) A house	licenses, registration with EPFO, applying there nnce days e @ 0.1% per day of Performance ed in
	(i) Above (1 to 15 days to be filled by N	days (IT approving authority)
Clause	e 2	
Author	rity for fixing compensation under clause 2.	
Clause	e 2A	
Wheth	er Clause 2A shall be applicable	Yes / No

SCHEDULE 'F'

C	la	11	c	Δ	5

Number of days from the date of issue of letter of acceptance	for reckoning
date of start Mile stone(s) as per table given below:-	day

SI No.	Description of Milestone (Physical)	date of start)	Amount to be with-held in case of non achievement of milestone
1.			
2.			
3.			
4.			

Time allowed for execution of work.

A 41	• 4	4		• 1
Aufh	ority	tΛ	de	cide
LAUUII	ULILY	w	uc	ciuc

- (i) Extension of time......(Engineer in Charge or Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)

PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site

Part	Portion of site	•	Time Period for handing over reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance		
Part B	Portions with encumbrances		
Part C	Portions dependent on work of other agencies		

Clause 7

Gross work to be done together with net payment /		
adjustment of advances for material collected, if any,		
since the last such payment for being		
eligible to interim payment	₹	

Clause 7A

Whether clause 7A shall be applicable Yes/No

Claus	se 8A				
	ority to decid it completion	le compensation on account if contract n plans		0	
Claus	se 10A				
List o	of testing equ	ipment to be provided by the contract	or at site	lab.	
	1	2.	3.		
	4	5.	6.		
Claus	se 10B(ii)				
Whet	her Clause 10	0 B (ii) shall be applicable	Yes/1	No	
Claus	se 10C				
Comp	onent of lab	our expressed as percent of value of v	vork: =	%	
Clau	se 10CA	Applicable/ Not Applicable			
		base price of materials			
		cuse price of materials			
S.N.	Materials Covered under this clause:	Nearest Materials (other than cement*, reinforcement bars, the structural steel and POL) for which All India Wholesale Price Index to be followed:	correspo	ce and its nding period of all rials covered under OCA*	
1					
2					
3					
4					
	cludes Ceme plants, if any	ent component used in RMC brought y.	at site fro	om outside approved	
CA is	to be mention	its corresponding period of all the mat oned at the time of approval of NIT. In modified by adopting latest base price	n case of	recall of tenders, the	
Clau	se 10CC	Applicable/ Not Applicable			
		be applicable in contracts with stipulate eeding the period shown in next colum	-		
Scheo	dule of comp	onent of other Materials, Labour etc.	for price of	escalation.	
Comp	ponent of civ	il (except materials covered			
under	under clause 10CA)/Electrical construction Xm %				
		omponent of Labour -			
expre	expressed as percent of total value of work Y%				

covere	ed under clause 10CA i.e. Cement, Steel, POL and other material specified in the 10CA + Component of Labour)
Claus Specif	se 11 fications to be followed for execution of work
Claus Autho Amou	ority to decide deviation upto 1.5 times of tendered
12.2 &	& 12.3
for bu 12.5	ition Limit beyond which clauses 12.2 & 12.3 shall apply ilding work
(i)(ii)	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) Deviation Limit for items mentioned in earth work subhead of DSR and related items
Claus Comp	
	f mandatory machinery, tools & plants to be deployed by the contractor at site: 2
4	6
7	8 9
Claus	se 19C authority to decide penalty for each default
Claus	ee 19D authority to decide penalty for each default
Claus	se 19Gauthority to decide penalty for each default
Claus	se 19K authority to decide penalty for each default
Claus Const	se 25 itution of Dispute Redressal Committee (DRC)
Chair	man -
Memb	per -
Memb	per -

Clause 32 Requirement of Technical Representative(s) and recovery Rate

SI No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical representative)	Minimum Experience	No.	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 32(i) per month

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 38

Schedule/statement for determining theoretical quantity of cement & (a) (i) bitumen on the basis of Delhi Schedule of Rates printed by C.P.W.D. Variations permissible on theoretical quantities: (ii) Cement (a) For works with estimated cost put to tender not more than Rs. 25 lakh. 3% plus/minus. For works with estimated cost put to tender more than Rs. 25 lakh... 2% plus/minus. Bitumen All Works 2.5% plus & only (b) & nil on minus side. Steel Reinforcement and structural steel (c) sections for each diameter, section and category 2% plus/minus All other materials. Nil (d)

Annexure showing quantities of materials for areas of surfacing to be considered for working out minimum period of road roller

SI. No.	Material of surfacing	Quantity or area
1	Consolidation of earth sub grade	1860 Sq.m
2	Consolidation of stones soling 15 cm. to 22.5 cm thick	170 Cu.m.
3	Consolidation of brick soling 10 cm. to 20 cm. thick	230
4	Consolidation of wearing coat of stone ballast 7.5 cm to 11.5 cm thick	30 Cu.m.
5	Consolidation of wearing coat of brick ballast 10 cm. thick	60 Cu.m.
6	Spreading and consolidation of red bajri 6 mm.	1860 Sq.m.
7	Painting one coat using stone aggregate 12.5 mm nominal size-	
a)	@ 1.65 m3 per 100 m2 and paving bitumen A-90 or S-90 @ 2.25 Kg per m2	930 Sq.m.
b)	1.50 m3 per 100 m2 and bitumen emulsion or Road tar @ 2.25 Kg per m2	930 Sq.m.
8	Painting two coats using-	
a)	For first coat, stone aggregate 12.5 mm nominal size:	
i)	@ 1.50m3 per 100m2 with paving bitumen A-90 or S-90 @ 2 Kg per m2 or	
ii)	@ 1.35m3 per 100m2 with bitumen emulsion @ 2 Kg per m2 or	
iii)	@1.25 m3 per 100m2 with road tar @ 2.25 Kg per m2 or	600 Sq.m
b)	For 2nd Coat, stone aggregate 10mm nominal size 0.9 Cum. per 100 Sq.m with-	
i)	1kg of paving bitumen A-90 or S-90 or bitumen emulsion per Sq.m or	
ii)	1.25 Kg. of road tar, per Sq.m.	600 Sq.m
9	Re-painting with stone aggregate 10 mm nominal size 0.9 Cum. per 100 Sqm. with-	
a)	1Kg. of paving bitumen A-90 or S-90 per Sqm. Or	
b)	1.25 kg of Bitumen emulsion per Sqm.	1670 Sq.m.
10	2 cm premix carpet surfacing using 2.4 m3 of stone aggregate 10 mm nominal size per 100 m2 and binder including tack coat, the binder being hot cut back bitumen or bitumen emulsion specified quantities.	930 Sq.m.
11	2.5 cm. premix carpet surfacing using 3m3 of stone aggregate 10 mm nominal size per 100 m2 and binder including tack coat, the binder being hot cut back Bitumenor bitumen emulsion in specified quantities.	930 Sq.m.
12	4 cm thick bitumen concrete surfacing using stone aggregate 3.8 Cu.m. (60% 20 mm nominal size and 40% 12.5 mm nominal size) per 100 m2 and coarse sand 1.9 Cu.m. per 100 m2 and hot cut back bitumen over a tack coat of hot cut back bitumen.	460 Sq.m.
13	4 cm thick bitumen concrete surfacing using stone aggregate 4.8 Cu.m. (60% 25 mm nominal size and 40% 20 mm nominal size) per 100 m2 and coarse sand 2.4 Cu.m per 100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen	370 Sq.m.

14	6cm thick bitumen concrete surfacing using stone aggregate 5.8 Cu.m. (60 % 40 mm. nominal size and 40% 25mm nominal size) per 100 Sq.m. and coarse sand 2.9 Cu.m. per100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen. 280 Sq.m	230 Sqm
15	7.5 cm thick bitumen concrete surfacing using stone aggregate 7.3 Cu.m. (60% 50mm nominal size and 40% 40 mm nominal size)per 100 Sq.m. and coarse sand 3.65 Cu.m.per 100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen.	750 Sqm
16	2.5 cm bitumastic sheet using stone aggregate 1.65 Cu.m. (60% 12.5 mm nominal size, 40%10 mm nominal size)per 100 Sq.m. and coarse sand 1.65 Cu.m. per 100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen.	750 Sq.m.
17	4cm bitumastic sheet, using stone aggregate 2.6 Cu.m. (60%12.5mm nominal size 40%10 mm nominal size) per 100 Sq.m., coarse sand 2.5 Cu.m. per 100 Sq.m. and hot cut back bitumen over a tack coat of hot bitumen.	560 Sqm
18	Laying full grouted surface using stone aggregate 40 mm nominal size 6.10Cu.m. per 100 Sq.m. with binder, binding with 20mm to 12.5 mm nominal size stone grit. 1.83 Cu.m. per 100 Sq.m. and seal coat of binder and stone grit 10mm nominal size, 1.07Cu.m. per 100 Sq.m., the binder being hot bitumen or tar as specified.	460 Sqm
19	Laying full grouted surface using stone aggregate 50 mm nominal size 9.14 Cu.m. per 100 sq.m. groutin with binder, with stone grit 20 mm to to 12.5 mm nominal size, 1.83 Cu.m. per 100 Sq.m. and seal coat of binder and stone grit 10mm nominal size 1.07 cu.m /100 Sqm	370 Sqm
20	4cm. thick premix macadum surfacing using stone aggregate 25mm nominal size 4.57 Cu.m. per 100 Sq.m and hot bitumen binding with stone aggregate 12.5 mm nominal size 1.52 Cu.m.per 100 Sq.m. and seal coat of hot bitumen and stone aggregate 10mm nominal size. 1.07 Cu.m. per 100 Sq.m.	560 Sq.m.
21	5cm thick premix macadum surfacing with stone aggregate 25 mm nominal size, 6.10 Cu.m. per 100 Sq.m and hot bitumen binding with stone aggregate 12.5 mm nominal size 1.52 Cu.m. per 100 Sq.m. and seal coat of hot bitumen and stone aggregate 10mm nominal size 1.07 Cu.m. per 100 Sq.m	460 Sq.m.

AGREEMENT FORM (SPECIMEN)

Agreen	nent No
	This agreement made on this day between (hereinafter called CIT Kokrajhar
which	expression shall include its successors and assigns) of one part and (hereinafter called the Contractor which
	sion shall include the successors and assigns) the other part. Collectively CIT,
-	har & contractor referred as "Parties" and individually as "Party". WHEREAS
CIT,	KOKRAJHAR had awarded the
	after called "the Works") and the Employer has accepted the Bid by the
	ctor for the execution and completion of such Works and the remedying of any
defects	,
(Rupee	s) only.
NOW '	THIS CONTRACT WITNESSETH AS FOLLOWS:
1.	That the contractor shall truly and faithfully carry on the said jobs as it is done by the service business houses in proper manner standard and fashion for the work "
2.	The work includes installation and successful commissioning of all works as written in the Scope of Works and Terms and Conditions laid down in the Tender Notice.
3.	SCOPE OF WORK
	"·······".
4.	 OTHER TERMS AND CONDITION i. The job work order value is firm and no escalation will be payable and remain valid till the completion of job work.
	ii. Contractor has to comply all applicable labour law and has to deposit the PF/ESI etc. as per applicable law.

- iii. All local problems, disputes and conflicts whether with private, public and /or Government parties, must be sorted out at your end and it must be ensured by you that our work is not affected due to such occurrences. No additional cost will be claimed on account of this.
- iv. As number of other Contractors of CIT, Kokrajhar shall be working along with you, you will provide full Co-operation & work in tandem with other Sub contractors.

- v. You shall insure your persons and other resources at your cost. In case of accidents, injuries fatal to your men or equipment, CIT, Kokrajhar shall be indemnified.
- vi. In case you damage any of the CIT, Kokrajhar or any other agency's property or persons while execution of this contract you shall own full responsibility for the same and make good the loss.
- vii. You shall observe rules and regulations of CIT, Kokrajhar as well as all statutory laws including labour laws. You shall also maintain adequate records towards observance of the laws. CIT, Kokrajhar shall be indemnified in case of your default of non- observance of any of the statutory laws.
- viii. You shall carry out the work yourself and not assign / sublet it to anyone without prior permission of CIT, Kokrajhar.
- ix. No idle charges will be paid for any reason what so ever.
- x. Electricity and water shall be arranged by the vendor at his own cost. Nothing extra shall be paid on this account.
- xi. The rate defined is for the complete job inclusive of providing job workers' tools & tackles.
- xii. An authorized representative of the job work contractor shall be available full time at site to take the instructions from Engineer-in-Charge or his authorized representative.
- xiii. The job work may be carried out in shifts and in such case nothing extra shall be paid on this account.
- xiv. If at any point of time progress of job work is found unsatisfactory, CIT, Kokrajhar reserves the right to award the job work to another agency or to engage other agency/agencies to speed up the work.
- xv. The job work contractor shall arrange/prepare a sample of material/job work at his/its cost for approval on the direction of Engineer-in-charge (EIC) or his authorized representative. The decision of EIC regarding the acceptance or rejection of such sample shall be final and binding.
- xvi. The job work contractor shall keep the job work place clean and will remove the unwanted materials etc. from his/its job work place and will dispose off the same as per the instructions of EIC or his authorized representative.
- xvii. The job work contractor shall compensate for all the damage or loss occurred due to the negligence of his or his team, to any equipment, machinery, building, structure etc. belonging to the company or any other person, at the job work site.
- xviii. The job work contractor shall ensure that the job workers engaged by him do not indulge in misconduct, misbehavior any sort of violence at the job work place and residential area for labour provided by the company. In the event of any such incidents, the job work contractor shall take the prompt action against the concerned job workers as per the satisfaction of EIC or the company will be free to take an appropriate

- action against such job workers in the absence of appropriate action taken by the job work contractor.
- xix. You would strictly adhere to the delivery schedule/period, failing which penalty @ 1% per week subject to maximum penalty of 10% shall be levied to your account.
- xx. Temporary stoppage of job work by CIT, Kokrajhar due to force majeure or any other reason beyond the control CIT, Kokrajhar shall be abided by the contractor. No claims or compensation in this account shall be paid by the company. However, the completion/delivery period of job work contractor would be extended by such period.
- xxi. Any dispute arising out of this contract would be referred to the sole arbitrator appointed by the directors of CIT, Kokrajhar and award of the arbitrator shall be final and binding.
- xxii. You shall employ persons of competence and skill to complete this job within specified period.
- xxiii. However if the contractor is not performing well and not achieving the target, the company shall cancel the contract with immediate effect without assigning any reason and the contractor shall have no right or claim what-so-ever on the site and shall vacate the site immediately.
- xxiv. Any theft by workers of contractor & If there any cheat in duplicate copy by overwriting of unskilled to skilled or in number of workers will be viewed seriously and the concerned amount will be deducted from contractor's bill with additional penalty of Rs.500/- of each theft.
- **xxv.**Contractor shall abide by all safety rules of the company and for the workers. Contractor has to manage generated scrap (while executing) and store the same in pre allotted space/location at the site

5. PAYMENT TERMS

- i. The rates quoted by the contractor is inclusive of all taxes and duties.
- ii. Payment will be made as and when fund is made available by the concern department.
- iii. Without prejudice to the obligation of the Supplier/Contractor under law, any Income Tax, which CIT, Kokrajhar may be required to deduct by law/statute, shall be deducted at source and shall be paid to the Income Tax authorities on account of the supplier, CIT shall provide the Supplier a certificate for the such deduction of tax.
- iv. The adjustment of the contact price towards imposition of new taxes or abrogation of existing taxes due to statutory variation shall be applicable only if new tax is enacted or existing tax is abrogated within the contractual delivery/execution period. For any upward variation due to enactment of new tax or abrogation of existing tax after contractual period, adjustment in the contract price shall not apply, although for any downward variation, CIT shall make necessary adjustment in the rate of the items.
- v. The supplier shall bear and pay all liabilities in respect of statutory variations in taxes and duties and imposition of new taxes and duties that

- may imposed after the contractual period.

6. TERMINATION OF CONTRACT

CIT, Kokrajhar reserves the right for without any judice to any other remedy for breach of contract, may by written notice of default sent to the contractor to terminate this contract in whole or in parts,

- (a) If the Supplier is found defaulter for delayed supply or failure to deliver satisfactory performance or supply of substandard materials pursuant to NIB conditions.
- (b) If the Supplier/Vendor is involved in any action of moral turpitude.
- (d) Mutual agreement between the parties to terminate this Agreement by giving one month prior written notice.

7. PERIOD OF CONTRACT

The delivery of goods at FOR destination in full as per the terms and conditions of the

contract/ order shall be completed within days from the date of issue of the

LOI/Work Order whichever is earlier.

- 8. For day to day co-ordination and smooth implementation of the contract, coordinating officer appointed by CIT, Kokrajhar may be contacted. The coordinator may be changed or additionally appointed at the discretion of CIT, KOKRAJHAR.
- 9. Arbitration: In case of any dispute in respect of any of the provision of this agreement, it shall be settled by mutual consultation. Unresolved disputes shall be referred to CIT, Kokrajhar, who shall himself act as the sole Arbitrator or shall name a sole arbitrator for this purpose. The provisions of Indian Arbitration Act of 1996 shall apply.

10. Governing Laws and Disputes

- a. This shall be construed and governed by the Laws of the India.
- b. Any matter, which is not stipulated in the Agreement, shall be settled in good faith by discussion among the parties in a spirit of understanding and cooperation.

WITNESS THE PARTIES hereto have signed this agreement on ΙN For and on behalf of For and on behalf of (Name of the Firm) (Employer) Witness Witness 1.

1.

TECHNICAL SPECIFICATIONS

1.0 SCOPE OF WORK

The scope of work envisaged under this tender covers includes:

Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1

no Girls' Hostel building at CIT, Kokrajhar, as per tender specifications,

drawings and standards etc.

2.0 SPECIFICATIONS

• **GENERAL**

Unless otherwise specified, Technical Specifications of Works shall generally relevant DSR Specifications of the including amendments thereafter. In absence of any detailed specifications, work shall be carried out as per relevant Indian Standard Specifications or Code of Practice. Wherever the codes and specifications are silent then the same shall be governed by sound engineering practices and the decision of the Engineer-in-Charge/ Consultant in matters of interpretation etc., shall be final and binding on the Contractor. The Contractor shall carefully acquaint himself with these specifications to determine his contractual obligations for the work. The conditions of these specifications will be binding on the Contractor and no deviation shall be permissible unless specifically approved by the Consultant/ Engineer-in-Charge in writing. The work under this tender shall be executed strictly in accordance with the constructional and material requirements defined under these specifications. However brief specifications are given hereunder for general guidance purpose of the tenderers. It shall clearly be noted that the bidders are required to give their lump-sum rates taking into consideration all aspects as per site requirements and drawings/specifications enclosed along with this tender document. Quoted offers shall be inclusive of all materials and labour cost .Water and Power shall have to be arranged by the contractor for execution of the tendered work. The contractor shall be responsible to complete the entire work in all respects and any other works necessary to complete the job though especially not covered in the scope of work.

• DRAWINGS/ DIMENSIONS

Figured dimensions on drawings shall supersede measurements by scale and drawings to a large scale take precedence over those to a smaller scale. Special dimensions in the specifications shall be checked on site. The dimensions where stated do not allow for wastage, laps joints etc., the levels. Measurement and other information concerning the existing site on the drawings are believed to be correct, but the contractor shall verify them for himself and also examine the nature of the ground as no claim or allowance whatsoever shall be entertained hereinafter on account of any errors or omissions in the levels or the description of the ground turning out to be different from what was expected or shown on the drawings.

CORRELATION OF DRAWINGS

Before commencement of work, the contractor shall correlate all relevant structural, construction and services drawings and satisfy himself that the information available is complete and unambiguous. The contractor shall be responsible for any error/ difficulty in execution/ damage incurred owing to any discrepancy in the drawings which has been over looked by him and has not been brought to the notice of the Engineer-in-charge/ Consultant before execution.

• BIS CODES OF PRACTICE

Wherever any reference is made in the specifications to any Bureau of Indian Standard (BIS) code of practice, it shall be understood to indicate the latest version of the code of practice in usage at the time of construction.

MATERIALS

- The materials to be used in permanent works shall be new and of the best quality. All materials shall be in accordance with Specifications and approved by the Engineer-in-Charge or his representative.
- Except otherwise specified or permitted by the Engineer-in-Charge or his representative all materials shall conform to the relevant Indian Standard Specifications (latest edition).
- In addition to special provisions made herein for sampling and testing of materials by particular methods, samples of all materials and proposed methodology for the execution of the works shall be submitted by the contractor for approval well in advance. The contractor shall supply the same to the testing lab, all carriages etc. shall be paid by the contractor, Samples, when approved will be retained by the Engineer's representative and for this purpose suitable labeled boxes for storage of samples shall be provided by the contractor. No material shall be supplied or used on permanent works until the samples of the same have been approved by the Engineer-in-Charge. If any material is rejected in testing the contractor shall promptly remove the rejected materials from the vicinity of the works to the satisfaction of the Engineer-incharge.
- ♦ Material shall be packed, transported handled and stored on the site carefully and in a satisfactory manner so as to prevent any damage and/or deterioration of any kind either during transit or storage.
- Notwithstanding any tests that the Engineer-in-Charge or his representative may direct to be carried out at the contractor's sub-contractor's and/or manufacturer's premises, the Engineer's representative shall be at liberty to carry out any further test after delivery of the materials at the site, at the cost of the contractor and may reject any or all materials which fail to comply with the required specifications.
- Where items are specified by trade names or manufacturer's reference, the contractor may provide alternative items, equal in quality and design, in case of non-availability of specified manufacturer, with approval of Engineer-in-Charge. At no extra cost, provided samples of all such alternative along with a sample of the specified material have been previously submitted and approved by the Engineer- in-Charge.
- \$\text{Should the Engineer-in-Charge or his representative at any time condemn}

any material or goods intended for use in the works as:

- a) Being inferior to samples previously submitted
- b) Having deteriorated in transit or on storage or on the site.

OR

c) Not complying with the specifications. The contractor shall promptly remove all such materials from the vicinity of the works to the satisfaction of the Engineer-in-Charge. Should the Engineer-in-Charge discover on the works any materials other than those approved, he may order their immediate removal from the site. Any work executed with inferior materials is to be taken out and reinstated with approved material at the contractor's risk & cost.

• BRIEF OUTLINE OF THE SCOPE OF WORK:

The following brief outline of various items to be executed is listed out which are to be read in conjunction with the Technical specifications and drawings.

- Anti-termite treatment as per DSR specifications to be executed by reputed party (license holder)
- Earth work in excavation in all kinds of soils and in all lead & lift.
- Filling with surplus excavated earth.
- Filling with selected earth brought from outside at any lead & lift.
- Providing and filling silt earth / sand under floor in foundation.
- Providing and laying plain cement concrete 1:1.5:3 (1 cement: 1.5 coarse sand: 3 graded stone agg; 40mm nominal size) in foundation bed.
- Providing and laying M25 grade of concrete design mix.
- Providing cutting bending and placing steel reinforcement as per detail structural drawings.
- Providing and laying brick work in CM 1:4 (1 cement : 4 coarse sand) in foundation strength of the bricks should be of class designation 7.5.
- Providing and laying brick work in CM 1:4 (1 cement : 4 coarse sand) in superstructure strength of the bricks should be of class designation 7.5.
- High Density PVC rain water/ sanitary pipe with all specials and jointing.
- 12 mm cement plaster of mix 1: 4 (1 cement: 4 fine sand) on fair side of brick/concrete surface.
- 6mm ceiling plaster in CM 1:3 (1 cement : 3 fine sand)
- 15mm cement plaster of mix 1:4 (1 cement: 4 fine sand) on rough side of brick wall surface.
- 18 mm thick cement plaster in two coats under layer 12 mm thick cement plaster in 1:5 (1 cement: 5 coarse sand) finished with a top layer of 6 mm thick cement plaster 1:6 (1 cement: 6 fine sand)
- Providing drip course (bulging) on all external projected slabs and chajjas.
- Two or more coats of weather coat long life paint over a coat of cement primer on all exterior walls surfaces as specified in the schedule of finishes.
- Acrylic emulsion/ oil bound washable distemper as specified in the schedule of

- finishes over wall putty prepared surfaces.
- Enamel paint over wood /steel surfaces over a coat of approved quality primer.
- Plinth protection with 50 mm thick of cement concrete 1:3:6(1 cement: 3 coarse sand: 6 stone aggregate; 20 mm nominal size) over 75 mm thick bed of dry bricks with 12 mm thick cement plaster in 1:5 (1 cement:5 coarse sand) finished neat cement slurry.
- Wall putty with white cement base of average thickness 1 mm.
- Water proofing treatment to vertical and horizontal surfaces of sunken slab of W.C., kitchen etc. consists of cement slurry @4.4 KG per sqm with water proofing compound confirming to I.S.2645 and 20 mm thick cement plaster in 1:3(1 cement: 3 sand) mixed with water proofing compound of approved make.
- House drains as per drawings/specifications.
- All exposed MS members to be painted with deluxe multi-surface paint of required shade as per DSR specifications.
- All wood shall be kiln seasoned and chemically treated.
- Painting wood work with deluxe multi-surface paint of required shade as per DSR.
- MS roof truss including purlin fabricated out of MS rectangular / square/tubular hollow section conforming or relevant IS code including providing MS cleats, base plates, bolts and nuts including necessary cleats etc. for fixing ceiling joists as per drawing and roofing.
- Septic Tank and Soak Pit as per drawings.
- Pre painted galvanized iron sheet roofing (PPGI) of 0.5 mm thick.
- M.S. grill with MS flat, MS square bar as per drawing.

DOORS:

- Flush Door with wooden frame of seasoned timber (sal/holock).
- Door shutters should conform to ISI 2202 Part I.The details is as per the finishing schedule.

WINDOWS/ VENTILATORS:

- Windows and Ventilators shall be of aluminum type.

FLOORING & PAVING:

- Marble Work in flooring, skirting, wall etc.: Thickness of the marble should not be less than 18 mm and the size of the slab up to 0.5 sqm.
- Ceramic Tile flooring and double charged Vitrified Tile flooring as per DSR specifications.
- Granite work in counter top and steps: Thickness of the granite should not be less than 18 mm and the size of the slab area should not be less than 0.5 sqm. The granite is laid over 20 mm thick cement mortar in 1:4 (1 cement:4 coarse sand), joints treated with white cement mixed with matching pigment including rubbing, curving, moulding and polishing to edges to give high glossy finish.
- Pavers: Providing and laying 60 mm thick factory made cement concrete interlocking pavers block of M30 grade made by block making machine with strong vibratory compacted bed of coarse sand.

SANITARY AND PLUMBING WORKS:

- Indian/ European pattern W.C. as per drawing.
- Table top Wash basin at toilet as per drawing.
- Mirror 600mmx450mm.
- Providing soap dish in the Toilet.
- Towel ring/ rail as per drawings
- Rain water pipe (PVC) 150mm dia with necessary fittings like bends, tees, junctions floor traps, terminal guard etc. with pipe clips and joints as per requirements
- Floor trap with CP jalli of 125 mm nominal dia in toilet, kitchen.
- PVC soil/ waste water pipe (110mm dia,); vent pipe (75mm dia,) with necessary fittings like bends, tees, junctions floor traps, terminal guard etc. with pipe clips and joints as per requirements of sanitary scheme.
- Septic Tank with Soak pit, Inspection chambers, manholes, drainage pipes etc. as per drawings.

SPECIFICATIONS FOR CIVIL WORK

1.0 SPECIFICATIONS FOR EXCAVATION AND EARTHWORK:

1.1 SCOPE:

The scope of work broadly includes but is not necessarily limited to the following i.e. clearing of the site, excavation of foundation trenches, back filling, disposal of surplus earth as required including dewatering, shoring and strutting. Contractor shall provide all tools, labour, equipment and incidentals necessary required for completion of all aspects of work covered in these specifications.

1.2 TYPES OF SOIL:

Contractor shall thoroughly acquaint himself with the types of soil in excavation by an inspection of nature of the ground at site & scrutiny of the investigation details available with the Consultant.

1.3 CLEARING THE SITE:

The site on which the structure is to be built shown on the drawings and the area required for setting out and other operations like road, drains, sheds, etc. should be cleared and all obstructions, loose stones, materials and rubbish of all kinds, stump, brush wood and trees removed as directed, roots being entirely grubbed up. All useful materials obtained will be the property of the Engineer-in-charge and will be handed over to the Consultant. Rejected materials will be removed by the contractor to his own dump.

1.4 GROUND LEVELS AND SITE LEVEL PLAN:

Before starting the excavations, the requisite block levels of the entire plot shall be taken by the contractor in consultation with the consultant and a proper record of these levels to be kept, which shall be jointly signed by the Contractor and the Consultant. A block level plan showing all the ground levels of the plot shall be prepared and shall jointly be signed by the Contractor and the Consultant/Engineer-in-Charge.

1.5 SETTING OUT:

After clearing the site, and preparing the site level plan, the Contractor will set out the center lines of the buildings or other involved works and get the same approved from the Consultant.

It shall be the responsibility of the Contractor to install substantial reference marks, bench marks etc. and maintain them as long as required by the Consultant. The Contractor will assume full responsibility for proper setting out, alignment, elevation and dimension of each and all parts of the work.

1.6 <u>EXCAVATION AND PREPARATION OF FOUNDATIONS FOR</u> <u>CONCRETING:</u>

1.6.1 General:

Foundations trenches shall be dug wet or dry to the dimensions as shown on the drawings or as directed by the Consultant. The excavated materials shall be stacked at a sufficient distance away from the edge of the excavated pit so as not to endanger the stability of the sides. The soil heap shall not exceed more than 2m from the ground.

The Contractor shall, at his expense and without any extra charge, make provision for all shoring and strutting, extra excavation in slope, extra excavation in working space, dredging or bailing out water, and the excavation shall be kept free from water when the foundation work is in progress.

If the excavation is carried out to greater width, length or depth than specified, extra depth shall be made up by filling in lean concrete and extra length or width by filling in with earth rammed hard or by masonry as directed by the Consultant's. Cost of such extra excavation and the filling required therein as specified above shall be borne in full by the Contractor.

If required to protect the sides of the pits and trenches, timber shoring and strutting shall be erected. The timbering shall be closed or open depending on the nature of the soil and work, and arrangement of timbering including sizes and spacing of members used shall be as approved by the Consultant. NO EXTRA CHARGES shall be admissible on this account.

The bottoms of all excavation shall be trimmed and leveled in accordance with drawings / directions of the Consultant / Engineer-in-Charge. The bottoms of all excavation shall be rammed and wetted before deposition of concrete. The Contractor shall report to the Consultant / Engineer-in-Charge when the excavation is ready to receive concrete. NO concrete shall be placed in foundations until the contractor has obtained the approval of Consultant/ Engineer-in-charge.

1.6.2 PROTECTION:

All foundation trenches and similar excavations shall be strong, fenced and marked with red lights at night for watchmen to avoid accidents.

Adequate protective measures shall be taken to see that the excavation does not affect or damage adjoining structures. All measures required for the safety of the excavation the people working in and near the foundation trenches, property and the people in the vicinity shall be taken care by the contractor at his own cost, being entirely responsible for any injury and damage to property

caused by his negligence or accident due to his construction operations.

1.6.3 STACKING OF EXCAVATED MATERIALS:

Work for excavation shall include sorting out useful materials and stacking them on site as directed. Materials suitable and useful for back filling, plinth filling, leveling of the plot or other use shall be stacked convenient places, but not in such a way as to obstruct free movement of men, equipment and vehicles or encroach on the area required for constructional purposes.

1.7 **BACKFILLING:**

1.7.1 Earth obtained from excavation (or approved earth brought from outside for which no extra payment shall be made) shall be filled in layers as described in 1.7.3 around foundations and under floors. In case extra earth used for filling is required under floors, plinth protection including sit outs, courtyards, and the contractor will do at their own cost. The lumpsum offer shall be deemed to include the earth filling required under floors and plinth protection with plinth height shown in drawing above the bottom of the foundation concrete and finished courtyard level shown in Drawing below DPC coping level of the main building.

1.7.2 **QUALITY OF FILLING:**

Fill shall be well compacted, well graded earth or sand and shall be free from tree stumps, organic matter, seed and peat etc. Where earth or sand from source other than excavation at site is used, the quality of such earth or sand shall be the same as that obtained from excavation at site, or superior to it. Fine sand for filling is River Sand. Black Cotton soil shall not be used for back filling or plinth filling.

1.7.3 **COMPACTION:**

The fill shall be spread in layers not exceeding 20 cm thick and each layer shall be watered and thoroughly consolidated by suitable mechanical rollers, rammers, vibrators or other approved plant or system of compaction. The fill material shall be pulverized before depositing in place. Optimum moisture content shall be maintained for the filled materials. Compaction shall be done so as to achieve a dry density of not less than 90% of the maximum density obtained at optimum moisture content, except for the upper 20 cm layer which shall be compacted to a density of not less than 95% of the maximum density. In order that the fill shall be reasonably uniform throughout,, the material shall be dumped in place in approximately horizontal layers "Edge dumping", a process by which materials is pushed off edge of the fill and allowed to roll down the slope shall not be carried out, If there is traffic over the fill during construction, either by construction equipment or otherwise, it should be routed to make the compaction as uniform load shall be maintained and also care shall be taken to prevent any wedging action.

1.8 **DE-WATERING:**

Work for excavation shall include bailing or pumping out water which may accumulate in the excavation during the progress of work either from subsoil, seepage, springs, rain or any other cause and diverting surface flow if any by bunds or other means. Pumping out water shall be done in such approved manner as to preclude the possibility of any damage to the foundation trenches, Concrete or masonry of any adjacent structure. When water is met with in foundation trenches, pumping out water shall be from an auxiliary pit of adequate size dug slightly outside the building excavations. The depth of the auxiliary pit shall be more than the working foundation trench levels. The

auxiliary pit shall be refilled with approved excavated materials after dewatering is over. The excavation shall be kept free from water -

- 1. When Concrete/Reinforcement Work/water Proofing work is in progress.
- 2. Till the Consultant consider that concrete / mortar is sufficiently set.

1.9 **SURPLUS EXCAVATED MATERIAL:**

All excavated material certified as surplus and not useful, shall be removed by the Contractor from the site an approved manner at his own cost and risk so as indemnify owner from any claims any time of whatsoever nature.

1.10 CONTRACT SUM TO INCLUDE:

Apart from other factors mentioned elsewhere in this contract, the contract sum shall also include for the following:

- (a) Clearing site.
- (b) Setting out works, profiles etc. as required and setting up bench marks and other reference marks.
- (c) Providing shoring and strutting and subsequently removing the same.
- (d) Bailing and pumping out water as required and directed.
- (e) Excavation at all depth (unless otherwise specified in the drawings) and removal of all materials of whatever nature wet or dry and necessary for the construction of foundation etc. and preparing bed for laying concrete.
- (f) Sorting out useful excavated materials, transporting them beyond the structure and stacking them neatly on the site for back filling or reuse as directed.
- (g) Back filling the trenches alongside masonry or concrete with approved excavated material up to the natural ground level including watering and ramming.
- (h) Necessary protection (including labour, materials and equipment) to ensure safety against risk of accident.
- (i) Drilling small holes as directed to explore the nature of substratum if necessary
- (j) Excavation if soft rock / hard rock if necessary.

2.0 SPECIFICATIONS FOR ANTITERMITE TREATMENT:

2.1 GENERAL:

Prevention of termite from reaching the super structure can be achieved by creating a chemical barrier between the ground and the building by treating the soil beneath and around the foundations. The work shall be carried out as per IS 6313 part II of 2001 or latest edition.

This shall be provided to sides and bottom of trenches and footing including treating the backfill of foundations up to ground level and the vertical surface of wall, and filling of each under floors and treating the surface at ground level 900mm around the building.

2.2 **MATERIAL**:

Anti termite treatment, shall be carried out strictly in accordance with Assam PWD specifications using Chloropyriphos (CPP) an Emulsified concentrate @ 1% concentration or any other approved chemical.

2.3 PRE-CONSTRUCTION CHEMICAL TREATMENT:

This is a process in which chemical treatment is applied to a building in the

early stage of its construction at the rate specified in IS 6313 part II of 2001 or the latest edition.

Hand operated pressure pump shall be used for uniform spraying of the chemical. To have proper check for uniform spraying of chemical graduated containers shall be used. Proper check should be kept that specified quantity of chemical is used for the required areas during the operation.

2.4 TIME OF APPLICATION:

Soil treatment shall start when foundation trenches and pits are ready to take lean concrete in foundations. Laying of lean concrete shall start when chemical emulsion has been absorbed by the soil and the surface is quite dry. Treatment should not be carried out when it is raining or the soil is wet with rain or sub soil water. The foregoing applies also in the case of treatment to the filled earth surface within the plinth before laying the sub grade for the floor

2.5 DISTURBANCE:

The treated soil barriers shall not be disturbed after they are formed. If by chance, treated soil barriers are disturbed, immediate steps shall be taken to restore the continuity and completeness of the barrier system.

2.6 TREATMENT OF COLUMNPITS AND WALL TRENCHES:

- (a) The bottom surface and the sides (up to a height of above 300mm) of the excavation made for column pits and trenches shall be treated with the chemical at the rate specified in IS 6313 part II of 2001 or the latest edition.
- (b) After the column foundation and the wall foundation come up, the back fill in immediate contact with the foundation structure shall be treated at the rate specified in IS 6313 parts of 2001 or latest edition of the vertical surface of the substructure for each side. If water is used for ramming the earth fill, the chemical treatment shall be carried out after ramming operation id done by prodding the earth at 150mm centers close to the wall surface and spraying the chemical with the above dose. The earth is usually returned in layers and the treatment shall be carried out in similar stages. The chemical emulsion shall be directed towards the concrete to masonry surface of the columns and walls so that the earth in contact with these surfaces is well treated with the chemical.
- (c) In the case of R.C.C framed structure with columns and plinth beams and R.C.C basement with concrete, mix is rich and dense (being 1:2:4 or richer), it is unnecessary to start treatment from bottom of excavation for columns and plinth beams. The treatment shall start at the depth of 500 mm below ground level. From this depth the back fill around the column, beams and R.C.C basement wall shall be treated at the rate as per IS 6313 part II of 2001 or the latest edition. The other details of treatment shall be as laid down in the clause (b) above.

2.7 TREATMENT OF TOP SURFACE OF PLINTH FILLING:

The top surface of the filled earth within plinth wall shall be treated with chemical emulsion at the rate as per IS 6313 part II of 2001 or latest direction (surface area) before the sand/sub-grade is laid. Holes up to 50 to 70 mm deep at 150mm centers both ways shall be made with crow bars on the surface of the soil with chemical emulsion.

2.8 TREATMENT OF JUNCTIONS OF WALL AND FLOOR:

To achieve continuity of the vertical chemical barrier on inner wall surface from the ground level, small channel 30×30 mm shall be made at all junctions of wall and columns with the floor (before laying the sub-grade) and rod holes made in the channel up to ground level 150mm apart and the chemical emulsion poured along the channel as per rate of application, mentioned in IS 6313 Part II of 2001 or the latest edition so as to soak the soil right up to bottom. The soil shall be tamped back into place after this operation.

2.9 TREATMENT OF SOIL ALONG EXTERNAL PERIMETER OF BUILDING:

During progress of work, provide hole in the soil with iron rods along the external perimeter of the building at intervals about 150 mm and depth 300 mm and filling these holes with chemical emulsion at the rate (as per IS 6313 part II of 2001 or the latest edition) per meter of perimeter of the external wall.

2.10 TREATMENT FOR EXPANSION JOINTS:

Anti termite treatment shall be supplemented by treating through expansion joints after the sub grade has been laid as per IS 6313 part II of 2001 or the latest edition.

2.11 TREATMENT OF SOIL SURROUNDING PIPE AND CONDUITS:

When pipes and conduits enter the soil inside the area of the foundations, the soil surrounding the points of entry shall be loosened around each such pipe or conduit for a distance of 150 mm and up to depth of 75 mm before treatment is commenced. When they enter the soil external to the foundations, they shall be similarly treated unless they stand clear of the walls of the building by about 75 mm for distance of over 300 mm from ground level.

2.12 SAFETY PRECAUTIONS:

All chemicals used for anti termite are poisonous and hazardous to health. These chemicals can have an adverse effect upon health when absorbed through skin, inhaled as vapors or spray mists or swallowed.

Person using or handling these chemicals should be warned of these dangers and advised that absorption through the skin in the most likely source of accidental poisoning. They should be cautioned be observe carefully the safety precautions given below:

These chemicals are usually brought to site in the form of emulsifiable concentrates. The containers should be clearly labeled and should be stored carefully so that children and pets cannot get at them. They should be kept securely closed.

Special care should be taken to prevent skin contact with concentrates. Prolonged exposure to dilute emulsions should be avoided. Workers should wear clean clothing and should wash thoroughly with soap and water, especially before eating or smoking. In the event of severe contamination, clothing should be removed at once and skin washed with soap and water, if chemicals splash into the eyes they should be flushed with plenty of fresh water and immediate medical attention should be sought.

The concentrates are oil solutions and present a fire hazard owing to the use of petroleum solvents. Flames should not be allowed nearby during mixing. Care should be taken in the application and present a fire hazard owing to the use of petroleum solvents. Flames should not be allowed nearby during the mixing.

Care should be taken in the application of chemicals to see that they are not allowed to contaminate wells or springs whish serve as source of drinking water.

2.13 GUARANTEE:

The Contractor shall guarantee through a guarantee bound, the anti termite work for 10 years from the date of completion of project and shall indemnify the Engineer-in-charge against any defects that arise therein during the guarantee period as aforesaid. They shall immediately rectify, any defects that may occur therein, and repair all other damage occurring to any part of the structure on account of defect in Antitermite Treatment during the guarantee period of aforesaid.

3.0 SPECIFICATIONS FOR CAST - IN - SITU REINFORCED CEMENT CONCRETE:

3.1 GENERAL:

3.1.1 DESCRIPTION:

This section covers the requirements for finishing of cement concrete, proportioning, batching, mixing, testing, placing, compacting, finishing, jointing, curing and all other work as required for cast in place reinforced concrete. The contractor shall provide all the materials including cement, steel, labour, equipment, 'form work', scaffolding etc., required for completion of all reinforced concrete works as per drawings and documents. Cement concrete shall be composed of cement, fine aggregates, coarse aggregates, water with or without admixture as approved, proportioned and mixed as specified herein.

RELATED WORK SPECIFIED ELSEWHERE

- (a) Steel Reinforcement
- (b) Form Work

APPLICABLE CODES AND STANDARDS:

The codes and standards generally applicable to the work of this section are listed hereinafter.

IS:	383	Coarse and fine aggregates from natural sources for concrete.
IS:	456	Code of practice for plain and reinforced concrete.
IS:	516	Methods of testing for strength of concrete.
IS:	1199	Methods of sampling and analysis of concrete.
		Performed fillers in expansion joints in concrete non-extruding and
IS:	1838	resilient
		Type
IS:	1946	Code of practice for use of devices in walls, ceiling and floors of so d
		Construction
IS:	2389	Methods of testing of aggregates for concrete's
IS:	2505	Concrete vibrators, immersion type
IS:	2645	Integral cement water proofing compounds

IS:	3414	Code of practice for design and installation of joints in buildings
		Code of practice for use for immersion vibrators for consolidating
IS:	3558	concrete
IS:	4082	Recommendation on stacking and storage of construction materials
IS:	7861	Code of practice for extreme weather concretizing
IS:	7861	Recommended practice for hot weather (Part I) concretizing
IS:	8112	Ordinary Portland Cement (Grade - 43)
IS:	12269	Ordinary Portland Cement (Grade - 53)
IS:	269	Ordinary Portland Cement (Grade - 33)

PART-I

The following clauses are intended to amplify the requirements of the reference document listed above and the contractor shall comply with these clauses.

3.2 **SUBMITTALS:**

3.2.1 Material Report:

Prior to start of delivery of materials required, the following shall be submitted by the contractor to the Consultant / Engineer - in - Charge for approval.

Suppliers and / or sources of all consumable materials including cement, steel, fine and coarse aggregates, water additives, bricks and timber etc.

Quality Inspection Plan to ensure continuing quality control of ingredients by periodic sampling, testing and reporting to the Consultant on the quality of materials being supplied.

3.3 PLANTS EQUIPMENT:

The Contractor shall obtain the approval of the Consultant / Engineer-in-Charge for all plant items he proposes to use for the manufacture and placing of concrete. Hand mixing of concrete is strictly prohibited. The contractor should use weigh batched concrete mixers in all structural works. The concrete mixer should be calibrated as per specifications of Bureau of Indian standards and the calibration report should be submitted to the Engineer- in-charge from time to time. All other tools and tackles like concrete lifting hoist, Vibrator nozzles, mortar pans, trowel, floats etc. should be adequate at site up to the satisfaction of the Engineer-in-charge.

The arrangement shall maintain all items of plant at all times in a clean and efficient working condition.

3.4 REPORTS FOR INSPECTION AND TESTING:

During concreting operations, the contractor shall conduct all inspection and testing, and all reports thereon shall be submitted in summary from to the Consultant/ Engineer-in-Charge.

3.5 <u>SCHEDULES:</u>

Before commencement of the work the contractor shall prepare working schedules of concreting giving dates and rate of pour for each item of work and submit the same to the Consultant / Engineer - in - Charge for their approval.

3.6 MATERIALS:

Before bringing to the site, all materials for cement concrete shall be approved

by the Consultant / Engineer - in - Charge. All approved samples shall be deposited in the office of the Consultant / Engineer - in - Charge before placing orders for the materials with suppliers. The materials brought on to the work shall conform in every respect of their approve samples.

Fresh samples shall be deposited with the Consultant / Engineer-in-Charge whenever type or source of any material changes. The contractor shall check fresh consignment of materials as it is brought on to the works to ensure that they conform to the specification and / or approved samples.

The Consultant / Engineer-in-Charge shall have the option to have any of the materials tested to find whether they are in accordance with specifications at the contractor's expense. All bills vouchers and test certificates which in the opinion of the Consultant / Engineer - in - Charge are necessary to convince him as to the quality of materials or their suitability shall be produced for his inspection when required.

Any materials which have not been found to the specification and not approved by the Consultant / Engineer - in - Charge shall be rejected forthwith and shall be removed from the site by the Contractor's at his own cost within the time stipulated by the Consultant / Engineer - in - Charge. The Consultant / Engineer - in - Charge shall have the powers to cause the contractors to purchase and use materials from any particular source, as many in their opinion be necessary for the proper execution of work.

3.6.1 CEMENT:

Cement shall be provided and stored by the Contractor at his own cost. Cement shall be stored on a raised floor in dry weather proof & dust free but well ventilated shed. Cement bags shall be stacked close together away from external walls and in stacks of not more than ten bags to avoid lumping under pressure. Cement stored during monsoons or cement expected to be in store for more than eight weeks shall be completely enclosed in 700 micron polyethylene sheet so arranged that the flap close on the top stack. The contractor shall ensure that protective polyethylene sheet is not damaged at any time during use.

Consignments of cement shall be used in order of delivery. A record shall be kept of the batch numbers of cement deliveries in such a form that the part of the works in which the cement is used can be readily identified, If during delivery or by test, the cement is found to be defective, the same shall be returned back forthwith.

The contractor shall be responsible for the storage of cement at the site and no claim will be entertained in the event of any damage occurring to cement due to faulty storage by the contractor or on account of his negligence.

Cement stored on site for a period longer than eight weeks shall be tested to the satisfaction of the Consultant / Engineer-in-Charge before it is used in the works. Cement that has failed the tests' conducted shall not be used in the works and shall be remarked from the site immediate by without fail.

On the following types of cement as specified shall be used

- Ordinary Portland Cement 33 grade confirming to IS 269
- Ordinary Portland Cement 43 grade confirming to IS 8112
- Ordinary Portland Cement 53 grade confirming to IS 12269
- Portland Pozzolana Cement conforming to IS 1489(Part 1 and part 2)

For concrete to be used in all structural elements in load bearing and RCC framed construction, ordinary Portland cement of 43 grade or higher is to be used. In rest of the works all the aforementioned types of cement can be used.

3.6.2 AGGREGATES:

STORING OF AGGREGATE:

Aggregate shall be stored on a suitable well drained raft of concrete, timber, metal or other approved material. The storage of aggregate on the ground will not be permitted.

Each size of aggregate shall be stored separately in such a manner as to prevent spillage and mixing of one aggregate with an adjacent aggregate. The dividing walls of any bins shall be of sufficient height and the aggregate shall be so deposited that a distance of 100 mm shall be left between the top of the division wall and any part of the aggregate stack. When stacking piling, the aggregate shall not form pyramids resulting in segregation of different size particles. The stacks shall be regular and of a height not exceeding two meter

- a) Aggregates from natural sources shall be in accordance with IS 383. The contractor shall submit to the Consultant / Engineer in Charge certificates of grading and compliance from the suppliers for all consignments of aggregates. In addition at site from time to time, the contractor shall test the aggregates in accordance with IS 2386 parts I, II, III and IV. The contractor shall allow for and provide all necessary apparatus for carrying out each test and for supplying test records to the Consultant.
- b) For fair faced concrete, the contractor shall ensure that aggregates are free from iron pyrites, and impurities which may cause discoloration.
- c) The fine aggregates shall be river sand, stone dust or other approved sand. It shall be free from clay, loan, and earth or vegetables matter and from salt or other harmful chemical impurities. It shall be clean, sharp, strong angular and composed of hard siliceous material.

The grading of sand as determined by the method prescribed in IS 2386 part I shall be within the limits of grading zone HI given below in Table I. When the grading falls outside the percentage limits given for sieves other than 600 micron, 300 micron and 150 micron (I.S) sieves by not more than 5 percent, it shall be regarded as falling within this zone. The 5 percent can be excess submission on one more sieves.

TABLE -1:- FINE AGGREAGTES

I.S. Sieve	Percentage pa	Percentage passing for Grading			
	ZONE -I	ZONE-II	ZONE-III	ZONE -IV	
10 mm	100	100	100	100	
4.75 mm	90-95	90-100	90-100	95-100	
2.36 mm	60-95	75-100	85-100	95-100	
1.18mm	30-70	55-90	75-100	90-100	
600 micron	15-34	35-59	35-60	80-100	
300 micron	5-20	8-30	8-30	20-65	
150 micron	0-10	0-10	0-10	0-15	

The maximum quantity of silt as determined by the method prescribed in IS 2386 Part II shall not exceed 8%.

Stone dust shall be within the limits of Grading Zone III given in table -1. When the grading falls outside the percentage limits given for the sieves other than 600 micron and 300 micron (IS) sieves by not more than 5 percent and on 150 micron sieves by not more than 20 percent it shall be regarded as falling within this zone. The 5 percent can be excess summation on one or more services.

3.6.2.1 COARSE AGGREGATES:

The coarse aggregates shall be crushed stone or broken stone. Coarse aggregate obtained from crushed or broken stone shall be angular, hay, strong, dense, durable clean and free from soft, friable, thin, flat, elongated flaky pieces. The coarse aggregate should be from the approved source/quarry.

Coarse aggregate river shingle or pit gravel shall be rounded, sound hard, clean, non porous, suitably graded in size with or without broken fragments and free from flat particle of shale, clay, silt, loam and other impurities.

Except where it can be shown to the satisfaction of the Consultant than a supply of properly graded aggregate of uniform quality can be maintained over the period of the obtaining the coarse aggregate in different sizes & blending them in correct proportions as and when required.

The maximum size of coarse aggregate shall be such that the concrete can be placed without difficulty so as to surround all reinforcement thoroughly and fill the corners of form work.

3.6.3 WATER:

Water used in the works shall be potable water and free from deleterious materials. Water used for mixing and curing concrete as well as for cooling and / or washing aggregate shall be fresh and clean, free from injurious amounts of oil, salts, acids, alkali, other chemical and organic matter.

Water shall be from the source approved by the consultant / Engineer-in-Charge and shall be in accordance with clause 4.3 of IS 456.

Before starting any concreting work and whenever the source of water changes the water shall be tested for its chemical and other impurities at ascertain its suitability for use in concrete for approval of the Consultant. No waters shall be used until tested and found satisfactory. Cost of all such tests shall be borne by the Contractor.

3.6.4 <u>ADMIXTURES AND ADDITIVES:</u>

Chemical admixtures are not to be used until permitted by the Consultant / Engineer-in-Charge in case their use is permitted, the type, amount and method of use of any admixture proposed by the contractor shall be submitted to the Consultant for approval.

The contractor shall further provide the following information concerning each admixture to the Consultant / Engineer-in-Charge.

- (a) Normal dosage and detrimental effects, if any, of under dosage and over dosage.
- (b) The chemical names of the main ingredients in the admixture.
- (c) The chloride ion content, if any, expressed as a percentage by weight of admixture.
- (d) Whether or not the admixture leads to the entrainment of air when used in manufacturer's recommended dosage.
- (e) Where two or more admixtures are proposed to be used in any one mix, the manufacturer's written confirmation of their compatibility.

In reinforced concrete, the chloride ion of any admixture as determined in accordance with IS 6925 and the total chloride ion in all admixture used in concrete mix shall not exceed 0.30 percent by weight of cement.

The admixture when used shall conform to IS 9103. The suitability of all admixtures shall be verified by trial mixes.

The addition of calcium chloride to concrete containing embedded metal will not permitted under any circumstances.

Regarding admixtures when used shall be based on lingo-sulphonates with due consideration to clause 5.2 and 5.30 of IS 7861.

Waterproofing admixtures shall comply with IS 2645.

3.7 **GRADES OF CONCRETE:**

The grades of concrete shall be in accordance with the following table. The grade of concrete to be used in each section of work will be shown in the drawings.

CHARACTERISTIC STRENGTH

Grade of Concrete	Characteristic strength i.e., compressive strength of 15 cm cubes at 28 days (N/mm²)	Nominal maximum aggregate size (mm)
10	10	25
15	15	25
20	20	20
25	25	20
30	30	20
35	35	20

Unless otherwise specified in the drawings the maximum nominal size of coarse aggregate for different grades of concrete shall as under:

(a)	For concreting in very narrow space or in very small thickness.	12mm
(b)	For all reinforced concrete work except in massive foundations.	20mm
(c)	For all ordinary plain concrete and massive reinforced foundations.	10mm

3.8 WATER-CEMENT RATIO:

The water cement ratio shall be within 0.45 & 0.70 depending upon the workability.

3.9 WORKABILITY:

The workability of fresh concrete shall be such that the concrete is just suitable for the conditions of handling and placing so that after compaction, it becomes completely consistent and homogeneously surrounds all the reinforcement and completely fills the formwork.

The workability of fresh concrete at the place of mixing shall be measured by compacting factor test and at the place of disposition by means of slump test During the finalization of trial mixes, the relationship between compacting factor and slump test shall be established for each grade of concrete as well as for various levels for workability.

Normally, in the condition of low water cement ratio as well as medium / high workability, the workability shall be achieved by increasing the cement content.

In case where the cement content is to be limited to reduce the heat of hydration, and the water cement ratio is also kept low to reduce the permeability or due to other requirements the desired workability may be achieved with the use of limited doses of plasticizer or air entraining agent. In such cases, the method of mixing and dosages of the plasticizer/air entraining agent shall be according to the manufacturer's specification and with the approval of Engineer-in-Charge.

Consistency and workability of the concrete shall be checked by measuring the slump of a truncated cone of concrete straight from the mixer under normal working conditions. The conical mould shall be of metal, 300mm high and 100mm and 200mm in diameter at top and bases respectively.

Moulds shall be prepared by the contractor. The slump range of concrete shall be as per the tabulation given below, as well as standards.

Slump test shall be performed as per IS 1881 at intervals established by the Engineer at the contractor's cost in such a way as to check that the degree of consistency established by the Engineer for work in progress is maintained. The table below gives a general slump range to be followed for various types of construction unless otherwise shown on drawings or instructed by the Engineer.

Various types of Construction	Slump in mr	n
	Maximum	Minimum
Reinforced foundation walls and footings	80	35
Plain footings, caissons and structure walls	75	20
Compressor foundations and for heavy mass constructions	50	20
Pumps and other misc. equipments foundations	75	35
Columns, slabs, beams and reinforced walls	100	50

3.10 **DURABILITY:**

The durability of concrete, depending on the exposure condition, is to be taken into account while designing the mix. For given aggregates, the cement content should be sufficient to make sufficiently low water/cement ratio and Appendix A of IS 456 shall be taken as guideline for durability considerations.

3.11 NOMINAL MIX CONCRETE:

Nominal mix concrete may be used for all concrete of grade up to M-20. Nominal mix concrete shall be in accordance with Table - 3 of clause 8.3 of IS 456. The stipulations of clauses 8.3.1 and 8.3.2 of IS 456 shall be taken into consideration.

3.12 **VOLUMETRIC MIX CONCRETE:**

Where concrete is specified in volumetric proportions such as 1:4:8, 1:3:6, 1:2:4, 1:1.5:3 etc. in the bill of quantities, coarse & fine aggregates shall be measured by volume & cement by weight. The water cement ratio shall be within 0.45 & 0.70 depending upon the workability.

3.13 CAST IN-SITU CONCRETING:

Before commencement of concreting, there must be a request for inspection in the prescribed format as decided by the EIC. Casting shall be done only after inspection and verification. The criteria for approval of concrete pour card will be:

4.0 BRICKS:

All conventional bricks shall be of minimum class designation 7.5 of standard dimension or as locally available as approved by the EIC. Compressive strength, water absorption, warpage and dimensional tolerances etc. must conform to DSR specifications. If required by the EIC, tests, in addition to those specified in the List of Mandatory Tests shall be conducted at the

contractor's expense to ensure quality. In general, the bricks shall be the best quality locally available within the specified minimum class designation.

Brick ballast:

Under burnt bricks shall not be used for making brick ballast. These shall be made from lump ballast or bats, Ballast that is brittle and easily crushed under beaters shall not be used.

4.1 CONVENTIONAL BRICK WORK:

- a) Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed should be executed as per DSR specifications. No bricks may be used until after they have been soaked in water for a minimum period as specified in DSR specifications.
- b) The brickwork should be kept moist for a period of 7 days and the methodology of curing should adhere to DSR specifications.
- c) Brickwork in half Brick walls shall conform to DSR specifications.

5.0 FLOORING/SKIRTING/CLADDING:

Preparation of plinth filling:

All plinth fillings shall be properly consolidated in layers, watered, rammed and allowed to consolidate to the EIC's satisfaction before any flooring is laid. When the flooring is to be laid over a foundation of sand, broken stone of brick or a combination of sand and broken stone or brick the filling shall be removed to a depth equal to the thickness of the flooring plus such foundation layers.

Foundations:

- i) Sub-layer of sand:
 - After the plinth filling has been prepared as detailed in specification above a sub layer of sand 300mm deep shall be laid watered and brought to an even surface.
- ii) Layer of broken stone or brick:
 - Over the sand a foundation course of bricks shall be laid and the interstices filled in with sand, The bricks shall be tightly packed and laid so as to break joint.

Tile floors:

- i) Foundation and cement floating under tiles:
 - Over the foundation as in (b) above 2 coats of cement plaster, 1 part of cement to 1 part of sand, prepared in a very liquid condition will be floated over it and allowed to set.
- ii) Laying:
 - After the tiles have been soaked in water for at least two hours and the cement foundation sprinkled with water, laying work may commence and shall start from the centre of the room or area to be tiled, work being continued in both directions so that borders are laid last. Each tile will be laid in and drawn up in neat cement, care being taken to exclude air bubbles. Threads shall be stretched cross the surface, at intervals, parallel to the short sides of the area to be tiled to serve as guide lines.
- iii) Cleaning:

After a small area has been laid all superfluous cement will be wiped off the surface. Stains shall be removed by moistening with hydrochloric acid and rubbing with pumice stone and afterwards washing with warm water.

vi) Fixing to walls:

In fixing tiles to walls the walls shall be rendered with cement plaster and the plaster scored diagonally and allowed to set. When laying the tiles work shall commence from the bottom, the back of each tile being smeared with neat cement of the consistency butter and the tile pressed into position.

6.0 DOOR SHUTTERS:

6.1 FACTORY MADE DOOR SHUTTER:

Providing, fitting and fixing 32 mm thick ISI marked Archid Lamydoor conforming to IS 2202 (Part-1) core of block board construction with frame of first class hard wood and well matched decorated laminate in both faces of shutter.

7.0 CEMENT PLASTERING:

- Internal plaster should be of 6mm, 12mm and 15mm.6mm plaster should be on all concrete surfaces. 12 mm plaster should be on fair side of brickwork and 15mm cement plaster is to be executed on the rough side of brickwork
- External cement plaster should be 18mm thick in 2 layers (top layer of 6mm thick cement mortar in proportion 1:6 with an under layer of 12mm thick cement mortar in proportion 1:5).
- Chicken wire mesh is to be embedded in cement concrete plaster of all RCC and brick joints.
- Ceiling plaster is to be completed before commencement of wall plaster and should conform to DSR Specifications.

• Preparation of surface:

All putlog holes in brick work and junction between concrete and brick work shall be properly filled in advance. Joints in brick work shall be raked about 10mm and concrete surface hacked to provide grip to the plaster. Projecting burrs of mortar formed due to gaps at joints in shuttering shall be removed.

The surface shall be scrubbed clean with wire brush/coil brush to remove dirt, dust etc. and the surface thoroughly washed with clean water to remove efflorescence, grease and oil etc. and shall be kept wet for a minimum of six hours before application of plaster.

• Proportion:

For 12mm & 15mm thick cement plaster in prop 1:4; 6mm thick cement plaster in prop. 1:3 and for 18mm thick cement plaster the underlayer is 1:5 prop and the top layer is 1:6.

• Mixing:

The cement and sand should be thoroughly mixed in dry condition. After dry mixing, the materials shall be wetter with just sufficient water to bring the mortar to proper consistency of thick paste. Mortar should be used immediately after mixing and arrangements shall be made so that not more

than 30 minutes elapse between the cement first coming in contact with the moisture and laying.

• Placing:

Plaster shall be laid over the prepared surface in one coat to the specified thickness and rubbed with 'PATAS' and trowel and shall be smooth, free from waviness and trowel marks. Curing the plaster must be kept wet throughout the entire process and for ten days after four hours of completion of plastering.

8.0 PAINTING:

8.01 Acrylic Emulsion Paint:

The surface shall be prepared by cleaning the surfaces of the structure and making free from all dust and dirt. Interior surfaces are to be provided with 1.5mm thick wall putty punning. A primer coat either of cement primer or of an approved distemper shall be applied. After the priming coat has dried the surface shall be lightly sand papered and dusted to make it smooth to receive distemper.

Distemper shall be prepared as per the directions of the manufacturers and conforming to the shade approved. It shall be applied in specified coats taking care to allow for drying of each coat before subsequent coats are applied.

8.02 Painting over wood work:

- a) The surface to be painted shall be thoroughly dry. All projections such as glue, all tool marks and other irregularities shall be carefully removed by means of a stopping knife and smoothened over and all head of nails or screws set 6mm below the surface.
- b) Knotting shall be carried out for all resinous woods such as pitch or red pine, an application of hot lime shall be applied to the portion to be stopped and allowed to remain for 24 hours after which it will be scraped off and the stopping completed.
- c) After the surface has been prepared as described above the primary coat shall be applied. When the primary coat has dried all nails and screw holes and all cracks shall be stopped and all irregularities shall be smoothened out with sand paper or pumice stone. Water proof sand paper is to be used.
- d) After the primary coat has dried out the subsequent coats shall be applied to the number specified. Each coat being allowed to dry thoroughly before the next coat is applied. Each coat when dry except the finishing coat should lightly rubbed down with sand paper and washed before the next coat is applied. The paint shall be applied evenly and properly by means of crossing and lying off the latter in the direction of the grain of the wood work.

8.03 Purchase of paint, varnish or oil:

Only the best brands obtainable will be used and should the contract permit the contractor to supply any paint, oil or varnish he shall purchase only such brands as the EIC shall approve of in writing. All purchases must be made direct from the manufacturers or through an agent approved of in writing by the EIC. Should the EIC so direct copies of all indents and receipts for purchase must be submitted for inspection.

8.04 Paint etc. to be purchased in sealed containers:

All paints, oil or varnishes supplied by the contractor must be produced for the

inspection of the Engineer in charge of the work in the manufacturers sealed and unopened containers. All containers from which the contents have been removed and are not required on the work must be destroyed and no extra payment will be granted for such destruction.

8.05 Only ready mixed paint to be used:

Only ready mixed or varnished of the make or brand specified will be permitted to be used exactly as received from the manufacturer without any admixture what so ever unless previously authorized, in writing, by the EIC.

9.0 DAMP PROOFING COURSE:

It shall consist of 1:2:4, plain cement concrete with approved water proofing materials of specified thickness. Edges of DPC shall be straight, even and vertical side shuttering shall consist of wooden or steel forms and shall be strong and properly fixed so that it is not disturbed during compaction and mortar or cement slurry does not leak through. When forms are struck the surface should be smooth without any honey combing. The surface shall be kept wet for seven days.

Before commencing the superstructure work, the top of concrete course shall be dried and cleaned of all materials. Blown type bitumen shall then be applied uniformly on the surface and the side of the concrete coming in contract with flooring on the inside shall also be painted with bitumen.

10.0 WALL PUTTY:

Surface preparation for plastered wall, ceiling etc. to be done by providing average 1 mm thick polymer based wall putty punning including clearing, rubbing with sand paper, filling gaps/depression etc, to make the surface even and smooth.

11.0 WATERPROOFING:

Waterproofing of Roof, Terrace:

Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS: 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation10 grouted with cement mortar 1:3 (1 cement: 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).

Waterproofing of sunken slabs:

Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement

compound consisting of applying: (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.

12.0 OVER HEAD WATER TANK

Over head water tank of plastic cylindrical vertical closed top (PCVC) tank over the staging with manhole cover with locking and cleaning arrangement including providing pads of size as required for inlet and outlet pipes complete as directed.

13.0 BLINDS

Supplying, fitting and fixing horizontal/ vertical blinds as per design and specifications complete as directed by the department.

SPECIFICATION OF SANITARY /PLUMBING WORK:

1.0 SANITARY WARES AND ALLIED FITTINGS:

All sanitary wares with their allied fittings must be first quality (best) as per approved make these should be approved by the Architects/Consultants, before use. No extra claim will be entertained for concreting for encasing the bottom or making bed for setting of IPWC, which are to be included in tender items. The flushing cisterns shall be automatic or manually operated high level or low level, as specified for water closets and urinals.

2.0 WATER CLOSET (INDIAN/ EUROPEAN TYPE) As per IS: 2556:

The WC shall be of white vitreous Chin unless otherwise specified of one piece construction of wash down type with integral 'P' or 'S' trap as required. It shall be of approved quality and pattern. The rest of the execution methodology should conform to DSR Specifications. Colour, Make and model are to be approved by the Engineer-in-charge/ Consultant.

INSTALLATION

The weight of the fixture and user are supported on the floor and not on the drainage pipe and this should be done in standard approved method.

SEAT AND COVER

The seat with lid shall be of plastic seat as specified with rubber buffers and shall be fixed in position by using Chromium plate hinges and screws, The seat shall be non-absorptive and from cracks and crevices in the materials. The plastic seat and cover where specified shall conform to L.S. specification and shall be of white colour unless otherwise specified.

3.0 WASH BASIN BASIN

The wash basins shall be of white or coloured vitreous China as specified and of approved quality, make and pattern, conforming to IS Specification. It shall be one piece construction with an integral combined overflow. The size of the basin shall be as specified.

FITTINGS

Each wash basin shall be provided with 15 mm CP brass pillar taps as specified, 32 mm CP waste CP Chain and rubber plug, union joints CP brass bottle trap of approved quality and design, with CP brass stop cock and P.V.C water inlet pipe of standard length dia. etc. complete in all respects of approved quality.

PAINTING

All brackets pipes etc shall be painted with two coats of enamel paint over a coat of primer.

FIXING

The counter top basin shall be supported on a granite platform.

WASTE CONNECTION

The waste shall discharge into a bottle trap.

4.0 TOILET FITTINGS

4.1 MIRROR

The mirror shall be of approved make glass with beveled edges. The size and shape of the mirror shall be as specified.

4.2 CHROMIUM PLATED STOP COCK, TAPS BIB COCKS, SHOWER SET, GUN METAL PEETS VALVES

Where not mentioned, cock's ant taps are to be of brass standard head chromium plated and are to be of approved make and brand as specified.

They must be capable to withstand at least 10.5 Kg / cm2 pressure applied for 5 minutes without leakage. The valves are to be of peat type gunmetal valves of 'Leader' brand. Other conditions remain same as cocks and taps.

4.3 BOTTLE TRAP

PTMT bottle trap are provided for wash basin and urinal. Bottle trap of 3/mm single pair moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling, 77mm breadth, with 25mm min. water seal.

4.4 TOWEL RING / RAIL

Towel ring shall be CP brass or aluminium bracket.

4.5 SOAP DISH

This shall be glass or PVC or CP brass as specified. It shall be fixed in position by means of CP brass screws to wooden cleats embedded in the wall.

5.0 TESTING

The soil and waste Pipes and fittings as laid shall be smoke tested to the entire satisfaction of the Architects/Consultants. Cost of testing shall be included in rates including the tools, machinery and fuel. No extra claim for this will be entertained. The material usually burnt is grease cotton waste, which gives out a clear pungent smoke, which is easily detected by sight and smell. Smoke shall be pumped into the drains of the lowest end from a smoke machine, which consists of blower and burner.

6.0 UPVC WASTE PIPE:

UPVC pipes are chemical resistance and insulation mix uniform wall thickness. UPVC pipes are conforming to IS-12818. These pipes are manufactured as per BIS standard and are available in deep blue colour. One end of the pipe is male threaded where as other end is female threaded socket. Threads are either V or trapezoid type and protection caps are provided on the threads to protect the threads in transit. Two types of pipes i.e. Shallow Well (C.S.) and Medium Well (C.M.) are available. Shallow Well Pipes can be used for depths up to 80 meters and Medium Well pipes can be used up to 250 meters.

6.1 UPVC FITTINGS:

The UPVC waste pipes fittings and their installation should conform to the specifications of approved manufacturer as per the approval of Engineer-incharge.

Sizes	Outer Diam	eter (D) (mm)	Wall Thicks	ness (t) (mm)	Length
	Min.	Max.	Min.	Max.	L (meter)
150 mm (6")	165	165.4	5.7	6.5	3
175 mm (7")	200	200.5	7.0	7.8	3
200 mm (8")	225	225.5	7.6	8.8	3
250 mm (10")	280	280.5	9.6	11.0	3
b) Medium Wel	I - C.M. (Suit	able upto 250 me	eters depth)		
40 mm (1½")	48	48.2	3.5	4.0	3
50 mm (2")	60	60.2	4.0	4.6	3
80 mm (3")	88	88.3	4.0	4.6	3
100 mm (4")	113	113.3	5.0	5.7	3
125 mm (5")	140	140.4	6.5	7.3	3
150 mm (6")	165	165.4	7.5	8.5	3
175 mm (7°)	200	200.5	8.8	9.8	3
200 mm (8")	225	225.5	10.0	11.2	3
250 mm (10")	280	280.5	12.5	14.0	3

6.2 POLYVINYL CHLORIDE (PVC) SOIL AND RAIN WATER PIPES:

The specification covers requirements for plain and socket end polyvinyl chloride (pvc) pipes with nominal outside diameters 40 mm to 160 mm for use for rain water applications. In this specification nominal outside diameter DN of pipes are 40, 50, 63, 75, 90,110,125,140 and 160 mm. Surface colour of the pipes shall be dark shed of grey. For other details and specifications refer code IS: 13592-1992 (amended to 1995).

7.0 SEWERS AND DRAINS

7.1 Excavation of trenches

The gradient is to be set out by means of sidewall and the depth of trench shall not be less than 1 meter measured under the ground. The width of the trench shall be the nominal diameter of the pipe plus 40 cm but it shall not be less than 52cm.

The bed of the trench, if in soft or made up earth, shall be well watered and rammed before laying the pipes and the depressions if any shall be properly filled with earth and consolidated in 20 cm layers. Depending on soil condition piling may even be necessary if so desired by the Architects / employer.

If rock is met with, it shall be removed 15 cm below the level of the pipe and the trench will be refilled with excavated materials and consolidated.

The excavated materials shall not be placed within 1 (one) meter or half of the depth of the trench whichever is greater from the edge of the trench.

The materials excavated shall be separated and stacked so that in refilling they may be re-laid and compacted in the same order to the satisfaction of the Architects / employer.

After the excavation of the trench is completed foundation of cement concrete (1:3:6) or lime conc. & specified of proper width and thickness to be laid with proper level all along under the length of the of the pipe with haunching as per drawing.

7.2 Laying, Jointing, Haunching of the Pipe and fittings

Drainpipes shall be laid in straight lines and to even gradients as shown on the drawings. The socket end of the pipes shall face upstream. Adequate care shall be exercised in getting out and determining the levels of the pipes and the contractor shall provide suitable instruments, for setting out, boning, rods and equipments necessary for the purpose. The joints are to be kept wet until the cement joints are properly set with wet bag. The cement mortar joints shall be cured at least for seven days. In case of SW Pipes joints (socket and spigot), they should be caulked first with tarred jute (spun) soaked in cement slurry of requisite diameter, almost quarter depth of the socket, after which cement mortar(1:1) is pushed with wooden chisel and finished bevelled at outside at 45 deg. instead of jute or hemp rubber gasket of proper size may also be used.

In case of pipes less than 25 cm dia. joints should be made at ground level with 3 pipes at a time and for larger ones 2 pipes at a time and after curing they should be rolled in foundation with the help of ropes.

All pipes should be properly honchoed and/or provided with chair as per drawing. Details of the foundation and covering etc are to be taken from the drawing provided. Where the pipes are crossing the building or road around concrete (1:3:6) is to be done to 15 cm thick over the barrel of the pipe.

7.3 Testing of line

The whole of the drain work shall be tested when laid and on the completion of the contract to the satisfaction of the Architect/ Consultants and shall be retested if necessary until found satisfactory.

The tests shall be by means of water under pressure at the highest point of the section under test and providing an air pipe at the lower end of the line. Maximum head 1.5 M must be maintained for 5 minutes. Contractor must consider in rates in the tender for concreting, encasing, Charges for cradle, testing, cleaning and washing the line etc. before handover.

8.0 EXCAVATION AND REFILL

Excavation for drain trenches shall be straight and to the correct depth and gradient. The trench bottom shall be of sufficient width to allow working space for pipe joints. The contractor must include the cost for excess width for excavation in the rate.

Where necessary sides of the excavation should be supported by planking and strutting, Suitable precautions are to be taken to prevent ingress of water into excavated areas, trenches, pits during construction to the satisfaction of Architects / employer.

The Contractor at his own expenses shall pump out or otherwise remove any or all water, which during the continuance of contract may be found in the excavation trenches and shall provide all pipe and drains, and other means necessary for the works clear of water during their progress.

In the extent of excavation being made deeper than necessary, it shall be filled to the proper level with 1:3:6 concrete at contractors own expense.

No excavation for pipeline shall be filled and line covered with earth or concrete until the line therein has been tested and passed Earth filling to the bottom of trenches and to a height of 30 cm above the top of the pipes shall be of selected materials, hand packed, watered if necessary, and well rammed on either side of the pipe. The remainder of the earth filling shall be in 15 cm. layers, each layer wetted, if necessary, well consolidated by proper ramming.

9.0 BURIED SERVICES

All pipes, ducts, table mains and other services exposed by the excavations shall be effectively supported and protected by timbering or other means for which no extra payment will be allowed. The Contractors shall be responsible for any damage occurring to the buried services and make good the same at his own cost to the satisfaction of the Architect/ Consultant. Any treasure-trove coil or object of antiquity which may be found on the site shall be handed over to the Employer.

10.0 INSPECTION CHAMBERS / MANHOLES

10.1 At every change of alignment, gradient or diameter of a drain there shall be a manhole or inspection pit. The maximum distance between manhole chamber shall be 30 meter for road or 15 meters within compound.

10.2 Size

All manholes Inspection / Chambers shall have internal dimensions as shown on drawings. The depth of invert shall be according to the gradient.

10.3 Foundation

The base concrete shall be 15 cm thick and with 1:3:6 concrete mixture laid over one brick flat soling. The slope shall be finished 75 mm beyond the external faces of the brick

10.4 Brick Work & Plaster:

The brick work shall be in cement sand mortar in the proportion 1:5 and 250 mm thick. The Joints be raked out and finished with cement and sand mortar, 1:2 trowel led hard and smooth to a thickness of 20 mm.

Inside of the walls shall be plastered as specified in the item and shall be finished with floating coat of neat cement. In wet ground 15 mm thick plaster shall be done on the interior surface of the walls also and this plaster shall be waterproofed with the addition of approved water proofing compound as per manufacturer's specification. Outside & middle surface — to have rough Plaster in cm (1:5) 15 mm thick averages.

10.5 Hunching and construction

On the top slab from pipe channel longitudinally at the centre, the channel is to be haunched up with concrete slopping upwards from the edge of channel to meet the side of the chamber at gradient of 1:6. The channel and the haunchings are to be floated to smooth hard surface with a coat of cement. Sewers of unequal sectional area shall not be jointed at the invert in a manhole unless it is unavoidable. The branch sewers should deliver sewage in the manhole in the direction of main flow and the junction must be made with care so that flow in main is not impeded. In case of drop connection CI shall be provided with heel rest bend at the bottom and bend with access door at the top for cleaning purposes.

10.6 Channel

Channel for drains coming from side of the manhole chamber shall be curved to meet the main drainage channel. The channels and benching shall be done in cement concrete 1:3:6 and rendered smooth with neat cement.

The brickwork in shallow manhole shall be corbelled to the required size for the cast-iron manhole cover and frame.

10.7 Footrest

CI footrests or MS Square rods of 20 mm shall be embedded in masonry. They shall be fixed 225 mm apart and projecting 125 mm from the wall face. Footrest shall be painted with bitumen as directed.

11.0 CUTTLNG HOLES, CHASES, ETC REPAIRING THE SAME

Holes and chases to be cut into walls, slab etc. must be of the minimum size and extent required to run the service and in no case superfluous cutting is to be resorted to. After the service is laid, the chase and holes must be made good in cement concrete with suitable finish. These repairs must be done very carefully so that the finished surface is uniform and harmonious with the rest of the adjoining surface. No extra claim will be entertained in this respect.

12.0 CAST IRON MANHOLE COVERS AND FRAMES

Unless otherwise mentioned the covers and frames shall obtain from approved manufacturer and shall be of following grades with ISI mark. Heavy-duty covers etc. under heavy vehicular traffic conditions and capable of bearing loads as per 1S: 1720.

Covers and frames shall be cleanly cast, double water seal type and they shall be free from air and sand holes cold shuts and warping which are likely to impair the utility of the Casting. All casting shall be free from voids whether due to shrinkage, gas inclusion or other causes. The cover shall be gas tight and water tight with proper seal arrangement, but can be easily opened and

closed and it shall be fitted in the frame in workmanship like manner. The cover used for sewer line should bear sewer engraved on top of casting. Similarly for storm line it shall be marked storm Size and dimensions are given below with weight, Covers shall have raised checkered design to provide an adequate non-slip grip. The covers and frames shall be coated with a material having tar base or with black bituminous composition The coating shall be smooth and tenacious. It shall not flow when exposed to temperature of 60 deg. C. and shall not so brittle as to chip off at a temperature of 0 deg C. The frame of manhole cover shall be firmly embedded to correct aligns and level s in RCC slab or plain concrete as the case may be sizes specified are the clear internal dimensions. Covers for manholes in the road proper shall not weigh less than 200 Kg on footpath and back yards, light weight covers of 45 cm. diameter having weight not less than 58 Kg or covers of size 92 cm x 45 cm or 61 cm x 45 cm having weight of 90 kg shall be used.

LIST OF APPROVED MAKES OF MATERIALS FOR CIVIL WORKS

Preferred makes of materials to be used in the work are as under. In case of non availability of these makes, the Engineer-in-charge may allow use of alternative BIS makes of materials in the work. Non BIS marked materials may be permitted by the Engineer-in-charge with prior approval of Engineer-in-charge.

Sl. No	Material	List of Approved Make
1	(i) Ordinary Portland Cement / Portland Pozzolona Cement.	ACC, Ultratech, Ambuja Cement, J.K. Cement, Century Cement, Shree Cement, Jaypee Cement, Vikram Cement, Star Cement.
	(ii) White Cement	Birla White , J. K. White
2	Reinforcement Steel	SAIL, Tata Steel, Rashtriya Ispat Nigam Ltd (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd., Shyam Steel.
3	Water proofing compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds	Fosroc, ROFF/Dr. Fixit(Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura)
4	Integral Water proofing compound with cement (for plaster & mortar)	Fosroc: Conplast 421 Dr. Fixit: LW+ Sika: Sikacin Asian Paints: Smart care vitalia & equivalent product of BASF, CICO, Ardex Endura
5	Water proofing for bathroom/ toilet/ balcony & other wet areas	Fosroc: Brush Bond CICO: Tapecrete Dr. Fixit: Pidifine 2K Sika: Nito Bond Asain Paints: Damp Block 2 K & equivalent product of BASF, Ardex Endura
6	Crystalline water proofing compound	Fosroc : Fosroc Crystalline Dr Fixit : Dr. Fixit Crystalline Sika : Sika Crystalline Asian Paints : Crystalline Quart & equivalent product of BASF, CICO, Ardex Endura
7	Grouts, Tile Adhesive	Latecrete, Kerokoal, BASF, Ardex Endura, Ferrous Crete, Pidilite.
8	Stone Adhesive	Pidilite - Fevimate excel, BASF, Ardex Endura, MYK Laticrete
9	Structural Steel	SAIL, Tata Steel, Rashtriya Ispat Nigam Ltd (RINL), and JSW Steel Ltd., Jindal Steel & Power Ltd.
10	Polycarbonate Sheet	GE Plastic, LEXAN, Bayers
11	Profile steel sheet	Ezydeck of TATA, Lloyd Superdeck, JSW/Jindal
11 (A)	Sandwish Profile Panel	Lloyd, Synergy, Metclo (Note: Profile steel sheet should be of make Tata/ Jindal / JSW).
12	Particle Board	Action TESA, Greenlam, Merino.
13	Laminates	Action TESA, Greenlam, Century Ply, Merino, Sunmica.

14	Flush door shutters	Duro, Century, Durian, Green ply.
15	Fire Rated Doors	Signum Fire Protection, Shakti Metdoor,
13	The Rated Doors	NAVAIR, Sukri, Promat International
1.6	Ealgo Coiling System	
16	False Ceiling System	Armstrong, Hunter Douglas, USG Boral,
17	Diverse of / Vancon	Saint Gobain, Aerolite, Durlum
17	Plywood/ Veneer	Green ply, Century, Merino, Duro, Durian
18	Melamine Polish	Asian Paints Melamine Gold, Wudfin of
10		Pidilite, Timbertone of ICI Dulux.
19	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich
	(a) Aluminium Section	Hindalco, Jindal, Indian Aluminum co.
	(b) Anodised Aluminium	Kilong, Alualpha, Classic, Ebco
	Hardware (HeavyDuty)	
20	Clear/Float/Frosted/Toughen	Saint Gobain, AIS, Modiguard, Ashai Float
	Glass/ Refractive Glass	
21	Stainless Steel Railing,	JINDAL, Dorma, Kich, GEZE, Godrej.
	Accessories etc.	
22	S.S. Door & window &	Jindal, Dorma, Kich, Doorset, Godrej, Ozone
	Fittings	
23	Silicon based water	G.E. Plastics, Dow Corning, Wacker,
	repellant /Weather Sealant	Pidilite (Dr. Fixit/Roff)
24	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr. Fixit/Roff), Sika, BASF
25	Mosaic tiles/ Chequered Tiles	Ultra Tiles, NITCO, Hyper(Mayur), Pavcon
26	Ceramic Tiles	Kajaria, NITCO, Johnson, Marbito, AGL
		(excluding Bonjar tile).
27	Vitrified Tiles (Antiskid/	Kajaria, RAK, NITCO, Johnson, Marbito,
	Matt/Glazed) (Only Double	AGL (excluding Bonjar tile).
	charged vitrified tile	
	permitted.)	
28	Paver block & Kerb Stone	Pavcon, Hyper Tiles/Dynamic Industries/
		Mayur, KK, Power, Sharda, Navya
29	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
30	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian
		Paints
31	Oil Bound Washable	Asian Paints : Professional Acrylic
	Distemper / Dry Distemper	Distemper, Nerolac: Beauty Acrylic
		Distemper Berger : Bison Acrylic Distemper
		Dulux ICI : Maxilite
32	1 st Quality Acrylic Distemper	Asian Paints : Tractor Aqua Lock Paint
	(washable/Ready mix/ Low	Berger: Commando Or equivalent paints of
	VOC)	Nerolac or ICI-Dulax.
33	Acrylic Emulsion Paints	Asian Paints : Professional Premium Interior
		Emulsion Paint
		Nerolac : Beauty Gold
		Berger : Rangoli total care,
		ICI-Dulux : Super Cover
34	Plastic Emulsion Paint	Asian Paints : Apcolite Heavy Duty Premium
		Emulsion Paint, Nerolac : Impression,
		Berger: Easy Clean, ICI-Dulux: 3 in 1
35	Premium Acrylic Emulsion	Asian Paints : Royale Luxury Emulsion
	(Interior)	Nerolac : Impression, Berger : Silk
		ICI Dulux : Velvet touch

36	Textured Exterior Paint	Asian paints, Nerolac, Berger Paints, Ultratech Paints Luxture		
37	Acrylic Smooth Exterior Paint	Asian Paints : Apex/ Professional Premium Exterior Emulsion, Nerolac : XL, Berger : Weather Coat ICI-Dulux : Weather Shield		
38	Premium Acrylic Smooth Exterior Paint with silicon additive.	1		
39	Synthetic Enamel Paint	Asian: Apcolite Premium gloss enamel, Nerolac: Synthetic Hi gloss Berger: Luxol Hi gloss ICI –Dulux: Gloss Synthetic enamel		
40	Cement Primer	Nerolac, BP White(Berger), Decoprime WT(Asian), White primer (ICI)		
41	Steel Primer(Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI		
42	Wood Primer	Asian Paints (Wood Primer – White/Pink), Berger ICI, Nerolac,		
43	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel		
44	Fire Paint	Asian Paints, Akzo Nobel Coatings India Ltd., PROMAT, Jotun,		
45	G.I. / M.S. Pipe	Tata, Jindal (Hisar)		
46	G.I. Fittings	Unik, AVR, Zoloto		
47	HDPE Pipes	Reliance, JainPipes, ORIPLAST, Supreme		
48	DI PIPES	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram		
49	DI Fittings	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram		
50	UPVC pipe and Fittings	Astral, Supreme, Ashirwad, Finolex		
51	Centrifugally Cast (spun) Iron Pipes & Fittings	NECO, Kapilansh, Electrosteel.		
52	C.I. Manhole covers, frames & GI Gratings	NECO, RAJ Iron Foundary Agra, BIC, Kapilansh		
53	SFRC Manhole covers & gratings	KK, JAIN, PARGATI		
54	CP Brass Fittings (Superior Range)	Jaquar, Grohe, Roca		
55	CP Brass Fittings (Normal Range)	Hindware, Jaguar (ESSCO series), Parryware, CERA, Plumber, Kerovit.		
56	(a) Sanitary ware, Fittings & accessories (Superior Range)	Kohler, Roca, Jaquar		
57	(b) Sanitary ware, Fittings & accessories (Normal Range)	Hindware, CERA, Parryware, Jaguar		
58	Mirror Glass	Atul, Modi Guard, Jaquar, CERA.		
59	CPVC Pipe & fitting	Astral, Supreme, Ashirwad		
60	Stainless Steel Sink	Neelkanth, Niralli, Jyna		

61	RCC Pipes (NP-2)	Lakshmi, Sood & Sood, Jain Pipe Co. (Newai), Mahaveer Enterprises (Newai), work well spun pipes, Pali.
62	UPVC Doors & Windows (Profile makers & their authorized fabricators only)	Fenesta, KOMERLING, RHEAU, Aluplast.
63	Extruded Polystrene Insulation Board	Dowcorning, Supreme, Texas, Analco
64	Heat Resistant Tiles	Swastik, Thermatek
65	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Ultratech
66	Floor hardener	Ironite, Ferrok, Hardonate
67	Modular Expansion Joint	Herculus, Sanfield India Ltd. Vexcolt
68	Glass Wool	Dow Corning, U.P. Twiga, Isover
69	UPVC doors and window hardware	Rotto, Dorset, Kinlong
70	AAC Block Adhesive	Ultratech, Ardex Endura, Ferrous Crete
71	AAC Block	UltraTech, Aerolite, Seporex, Ecolite, Orilite.
72	Water Tank (ISI mark only)	Sintex/Supreme
73	Gun metal ball valve with S.S. ball	Zoloto/Leader
74	DI Fittings	ELECTROSTEEL, KIWSAK, KEJRIWAL
75	DI Pipes	Electrosteel, Jindal Saw Ltd.
76	HDPE Pipes & fittings	Kisan/Prince/Supreme
77	Laminate	Decolam/Rotolam/Merino/Action Tesa
78	Pre-laminated particle board	Ecoboard/Novapan/Action Tesa
79	Cement Concrete tiles	NITCO/UNISTONE
80	EPDM Gasket	Hanu/Anand
81	Friction Stay/Hinges	Ebco/Classic ISI
82	Wire Mesh	Sterling Enterprises, Trimurthy Welded Mesh
83	Mortice Locks	Godrej/Golden Dorset/Dorma
84	Bitumen	Indian Oil, Hindustan Petroleum
85	Glass Panes	Modiguard/Saint Gobain/Ashahi
86	Nuts, Bolts & Screws-All in Stainless steel	Kundan/Puja/Atul
87	Gunmetal Valves (Full way Check Valves lever operated ball valve)	Leader/Zoloto

The materials which are not in above list, for that make will be approved by competent authority / Engineer-in-charge

CENTRAL INSTITUTE OF TECHNOLOGY BALAGAON, KOKRAJHAR, BTAD, ASSAM



NIT NO: CITK/MC/NIT/405/2020/1207 Dt.- 04/12/2020

Part - B: Financial Bid (Sechdule "A")

NAME OF WORK

Supply and Installation of Fire Hydrant System for 1 no Boys' Hostel & 1 no Girls' Hostel building at CIT, Kokrajhar.

BILL OF QUANTITY

SI No	DESCRIPTION	UNIT	Quantity	Quoted Rate		Amount
SINO	DESCRIPTION	UNII	Quantity	In Figure	In Words	Amount
1	Supply of M.S. pipe Medium class conforming to IS:1239 part-I including all fittings viz. elbow, tees, flanges, reducer socket, clamps, frushner, Gasket, Tie rod, Nut-bolt, washer, etc and Caring, Cutting, threading etc. with one coat Red oxide primer and two coat Red enamel paints.—					
а	100 mm dia	RM	210.00			
b	80 mm dia	RM	27.00			
С	25 mm dia	RM	14.00			
2	Supply of Butterfly Valve with complete accessories and counter flange & nuts bolts. PN 1.0, IS: 14846 /2000.					
а	100 mm dia	No.	9.00			

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BILL OF QUANTITY

SI No	DESCRIPTION	UNIT	Quantity		Quoted Rate	Amount
31 140	DESCRIPTION	UNIT	Quantity	In Figure	In Words	Amount
b	80 mm dia	No.	5.00			
3	Supply of stop Valve with reducer nipple, socket & nuts bolts. As per IS specification.					
а	25 mm dia	No.	14.00			
4	Supply of swinging type first aid Hose Reel Drum with 30m long 20mm dia rubber hose and Gun Metal shut –off nozzle, Reducer socket, nipple, union pipe complete set conforming to IS: 884.	No.	16.00			
5	Cost of Fire Hydrant Point , each point consisting of					
а	Supply and fixing SS landing valve conforming to IS- 5290 with 63 mm dia Instantaneous female coupling on the outlet with blank cap and chain, necessary companion flanges (as per table 'E' nuts,bolts, washer and gasket complete as per specification. (ISI marked)	No.	19.00			

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BILL OF QUANTITY

SI No	DESCRIPTION	UNIT	Quantity		Quoted Rate	
SINO	DESCRIPTION	UNIT	Quantity	In Figure	In Words	Amount
l b	Supply and fixing of weather proof hose cabinets with centre opening full front glass door and locking arrangement, suitable to accommodate one landing valve, 1 No. 30 M long hoses and 1 no. Branch pipe with nozzle. The cabinet shall be painted with one coat of primer and 2 or more coats of synthetic enamel paint of approved make.(Make:self Fabricated)	No.	19.00			
	Supply and fixing of 63mm dia 30mtr long RRL hose including SS male and female instantaneous type coupling with dinding wire complete in all respect. Hose shall conform to IS 636: 88 Type A and coupling to IS 903-1975 (ISI marked).	No.	19.00			
d	Supply and fixing standard short size SS branch Pipe with SS nozzle 16mm dia Outlet with standard instantaneous type 63 mm dia Coupling. (ISI marked)		18.00			
6	Supply & Fixing of Fire Alarm Hooter with audible range of 25 meter, 220 volt.	No.	14.00			
/	Supply & Fixing of Manual Call Box with hammer & chain	No.	14.00			

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BILL OF QUANTITY

SI No	DESCRIPTION	UNIT	Quantity		Quoted Rate	Amount
21 NO	DESCRIPTION UNIT		Quantity	In Figure	In Words	Amount
8	Cost of CI Non return Valve with complete accessories including matching flanges, nuts & bolts conforming to IS; 5312					
а	100 mm dia	No.	5.00			
9	Providing & Fixing of Gun Metal fire Brigade Connection (inlet collection head) consisting of 63mm instantaneous type male coupling with built in check valves and 150 mm dia flanged outlet complete with bolts, nuts and rubber insertions as per IS:904-1983 complete as reqd.					
а	Two way	No.	5.00			
10	Supply & fixing of of PVC water storage tank 5000 Ltr capacity ISI Marked, 'Syntex' brand with necessary fitting & connection accessories	No.	9.00			

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BILL OF QUANTITY

SI No	DESCRIPTION	UNIT	Quantity	Quoted Rate		Amount
				In Figure	In Words	Amount
11	Supply of Electric motor driven Horizontally mounted Terrace Buster Fire pump having C.I. body, capable for delivery 1450 LPM of water at 35 mtrs Head 3 Kg/cm2 pressure, of 1500 RPM, complete with manual starter. Make: Kirlosker/					
а	5 HP Motor	No.	5.00			
12	Supply of electrical manual starter Panel for Pump with necessary Wire, Cable, fitting accessories etc.	No.	5.00			
					Total Amount in Rs.	
					Discount if any	
_					Net total Rs.	-
					Round off Rs.	
					Say Rs.	

In Words:

No of cutting:

No of Correction:

No of overwriting: