



INDIAN INSTITUTE OF TECHNOLOGY MADRAS		
CHENNAI – 600 036		
e-Bid – 1 ELIGIBILITY BID		
e-Tender No: OE/MURA/132/2024/MANSUBMER		
Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), Indian Institute of Technology Madras, Chennai - 600 036 invites item rate e-Tenders, in two Bid system (Application for eligibility and financial bid) for the following work from the Tenderer who satisfy the Eligibility Criteria given below.		
1. PARTICULARS OF WORK		
1.	Name of work	Creation of Manned Submersible Experience Centre at National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai
2.	GEM NAR ID	GEM/GARPTS/16022024/M64OKLC9T2NO
3.	Earnest Money Deposit (EMD) : Scanned copy of Demand draft to be uploaded in web site.	Rs. 3,85,000/-
4.	Time period for completion	3 months
5.	Validity of the tender	120 days from the date of opening of the tender
6.	Last Date for Submission of e-Tender	26.02.2024 at 3.00 PM
7.	Date of Opening of the Eligibility document	27.02.2024 at 3.00 PM
8.	Date of opening of the financial bid	Will be intimated later to eligible Tenderer
9.	Address of the Engineer-in-Charge	Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), Room no 606, 6th Floor, New Academic Complex, Indian Institute of Technology Madras, Chennai – 600036.

Certified that this document contains 143 pages (including this page)

Principal Scientist

Certified that no addition and deletion has been made to the tender documents downloaded from the e-Tender web site.

Signature of the Contractor



INDIAN INSTITUTE OF TECHNOLOGY MADRAS

CHENNAI – 600 036

e - Tender No: OE/MURA/132/2024/MANSUBMER

e - Bid - 1

ELIGIBILITY DOCUMENT

Name of Work: Creation of Manned Submersible Experience Centre at National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai

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Principal Scientist



INDIAN INSTITUTE OF TECHNOLOGY MADRAS

CHENNAI – 600 036

INVITATION FOR e-TENDER

e-Tender No: OE/MURA/132/2024/MANSUBMER

Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTPWC), Indian Institute of Technology Madras, Chennai - 600 036 invites item rate e-Tenders, in two Bid system (Application for eligibility and financial bid) for the following work from the contractors who satisfy the Eligibility Criteria given below.

1. PARTICULARS OF WORK

1. Name of work: Creation of Manned Submersible Experience Centre at National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai

2. Earnest Money Deposit (EMD) : Rs. 3,85,000/- (Earnest Money in the form as prescribed in this tender Clause 3.2.2 shall be scanned and uploaded to the e-Tendering website within the period of tender submission).

3. Time period for completion : 3 months

4. Validity of the tender : 120 days from the date of opening of the tender

5. Last Date for Submission of e-Tender : 26-02-2024 @ 3.00 PM

6. Date of Opening of the Eligibility document : 27-02-2024 @ 3.00 PM

7. Date of opening of the Financial bid : Will be intimated later to eligible Contractors.

8. Address of the Engineer-in-Charge : Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTPWC), Room no 606, 6th Floor, New Academic Complex, Indian Institute of Technology Madras, Chennai – 600036

2. ELIGIBILITY CRITERIA

2.1. Experience in Similar works.

Tenderers who fulfill the following criteria are eligible to submit the Eligibility document Technical bid- Cover 1) and Financial bid (Cover 2).

Tenderers who have experience of having successfully completed works as detailed below during the last 7 (seven) years ending last day of the month previous to the one in which applications are invited:-

a. Three similar works each costing not less than Rs.77 Lakhs

or

b. Two similar completed works each costing not less than Rs.115.5 Lakhs

or

c. One similar completed work costing not less than Rs.154 Lakhs

And

At least one similar work costing not less than Rs.77 Lakhs should have been carried out for any Central Government department/ Central Autonomous Bodies / Central Public Sector Undertakings

“Cost of work” for this clause shall mean completed cost of work as mentioned in the final bill including internal electrical works, if any, carried out under single contract including cost of materials, if any, supplied by clients. However the cost of materials issued free of cost shall not be considered for calculating the cost of work. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for bids. **“Similar work”** for this clause means **“Civil building construction works”**. The following documentary proof shall be scanned and uploaded.

1. Completion certificates in case of works carried out for Government department.

The certificate should have been issued by an officer not below the rank of Executive Engineer.

2. Completion certificate and TDS in case of works carried out for private parties.

The completion certificate should have been issued by the Project Manager or equivalent officer for other works and should be obtained and delivered in sealed cover.

2.2. Financial

2.2.1 Should have an average annual financial turnover of Rs.96.25 lakhs during the last 3 years ending 31-3-2023. This should be certified by a chartered accountant.

2.2.2 Should not have incurred any loss in more than two years during the last 5 five years ending 31 – 3 – 2023.

2.3 Interested tenderers can view and submit the e-tender in the following order through the following e-tender website (<https://etenders.gov.in/eprocure/app>)

e-Bid I – Eligibility application shall be uploaded with

- 1) EMD as prescribed in this document Para 3.2.2
- 2) Necessary supporting documents as prescribed in the Para 3.2.3

e-Bid II – Financial bid shall be uploaded with

- 1) The tender for the work with various conditions, specifications, Bill of quantity, drawings etc.

2.4 Declaration

2.4.1 The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration as per format given in Annexure I of the tender document shall be submitted with the bid and Non-submission of self-declaration will lead to rejection of bid out rightly

2.4.2 Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16th September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I and Class-II local suppliers should be submitted in the prescribed proforma as per Annexure-II. Non-submission of self-declaration will lead to rejection of bid out rightly and the bidder will be treated as non-local supplier.

3. PROCEDURE FOR VIEWING AND SUBMISSION OF e-TENDER

3.1 Tender Documents may be downloaded from Central Public Procurement Portal <https://etenders.gov.in/eprocure/app>. The bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <https://etenders.gov.in/eprocure/app>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at “Help for contractors”. [Special Instructions to the Contractors/Bidders for the e-submission of the bids online through this eProcurement Portal]. Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type ‘IIT’. Thereafter, Click on “GO” button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <https://etenders.gov.in/eprocure/app> as per the schedule attached.

A. Instructions for submission of online bid:

- i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal [URL:https://etenders.gov.in/eprocure/app](https://etenders.gov.in/eprocure/app) by clicking on “Online Bidder Enrollment”. Enrolment on the CPP Portal is free of charge.

- ii. As part of the enrolment process, the bidders will be required to choose a unique user name and assign a password for their accounts.
- iii. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- iv. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.)
- v. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective “My Tender” folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
- vi. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
- vii. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option.
- viii. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Documents” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
- ix. The tenders will be received online through portal <https://etenders.gov.in/eprocure/app>. All the technical/Eligibility related documents should be uploaded in Technical bids in pdf format for evaluation purpose.
- x. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues. ii. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- xi. Scanned copy of the Demand Draft obtained from the scheduled bank for an amount of Rs.3,85,000/- towards Earnest Money Deposit (EMD) drawn in favour of **IIT Madras, Chennai-600 036** and payable at Chennai. EMD will be accepted only in the form DD. Any other forms other than DD will not accepted
- xii. A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected.

- xiii. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- xiv. The Tender Inviting Authority will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
- xv. The uploaded tender documents become readable only to public view after the tender opening by the authorized bid openers.
- xvi. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- xvii. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

Assistance to bidders

- i. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- ii. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120- 4001005]

3.2. The tender shall be submitted through the above e-Tender website as a two Bid tender.

e-Bid 1 (application for eligibility) shall be uploaded with:

1. Letter of transmittal in the enclosed format.
2. Scanned copy of the Demand Draft obtained from the scheduled bank for an amount of Rs.3,85,000/- towards Earnest Money Deposit (EMD) drawn in favour of **IIT Madras, Chennai-600 036** and payable at Chennai.
3. Details regarding experience, and financial standing. The following documents in support of experience and financial standing shall be uploaded with the application for eligibility.
 1. Financial information in the form – 'A' enclosed
 2. Details of similar works carried out in the past in form – 'B' enclosed
 3. Details of works in progress in form – 'C' enclosed
 4. Performance report of works referred to in form 'B' and form 'C' in Form – 'D' enclosed
 5. Details regarding the structure of the organization in form - 'E' enclosed .
 6. Details of technical and Administrative personnel in form – 'E1' enclosed
 7. Details of construction plant and equipment in form – 'F' enclosed
 8. GST Registration Certificate
 9. Letter of Transmittal
 10. TDS Certificate in case of works carried out for private parties.
 11. Declaration as enclosed in Annexure I & Annexure II.

3.3. e-Bid 2 shall contain

1. The tender for the work with various conditions, specifications and drawings etc
2. The spread sheet containing the Bill of Quantity can be downloaded from the above web site and the same shall be uploaded to the e-Tender website after filling the rates. The file name of the spread sheet document which is downloaded from the e-Tender web site should not be changed at any case.

4.OPENING OF e-TENDERS

4.1 e-Tenders can be uploaded in the e-tender website till the stipulated date and time of submission.

4.2. e-Tenders of only those tenderers, who have deposited Earnest Money Deposit in the prescribed form and other documents scanned and uploaded are found in order will be opened after 3.00 P.M.

4.3. Only e-Bid 1 containing the eligibility application & EMD will be opened on the date of opening of tender.

4.4. Tender Documents uploaded without valid EMD shall be summarily rejected.

4.5. The e-Bid 2 of only those tenderers who qualify as per the eligibility criteria will be opened on a date which will be intimated later but not later than 30 days from the date of opening of tender.

5. EVALUATION OF APPLICATIONS FOR ELIGIBILITY.

5.1 The applications received shall be evaluated for eligibility to take part in the tendering process by a two stage system.

5.2 Stage I – The applications will be evaluated for conformity to the eligibility criteria prescribed in 2.1 to 2.4.

5.3 Stage II -All those applications found eligible in stage I will be further evaluated for selection by the following scoring method based on the details submitted by the applicants.

a)Financial strength	(20 Marks)	Evaluation
i)Average annual turnover	20 marks	i)60% marks for minimum eligible criteria. ii)100% marks for twice the minimum eligibility criteria or more. In between (i) & (ii) – on pro-rata basis.
b)Experience in similar Class of works	(30 marks)	(i)60% marks for minimum eligibility criteria. (ii)100% marks for twice the minimum eligibility criteria or more

		In between (i) & (ii) – on pro-rata basis.			
c) Performance on work (20 marks) (time over run)					
Parameter	Calculation for points	Score			Maximum Marks
If TOR= (i) Without levy of Compensation (ii) With levy of Compensation (iii) Levy of compensation Not decided		1.0	2.00	3.00	>3.50
		20	15	10	10
		20	5	0	-5
		20	10	0	0
TOR = AT/ST, where AT = Actual Time ; ST=Stipulated Time in the Agreement plus (+) Justified Period of Extension of Time. Note: Marks for value in between the stages indicated above is to be determined by straight line variation basis.					
(d) Performance of works(Quality)(30 marks)					
	(i) Outstanding				30
	(ii) Very good				25
	(iii) Good/Fair/Satisfactory				20
	(iv) Poor				10

- 5.4. To qualify, the applicant must secure at least 50% (Fifty percent) marks in each one of the above criteria and 60% (Sixty percent) marks in aggregate.
- 5.5. The Indian Institute of Technology Madras reserves the right to restrict the list of eligible contractors to any number deemed suitable.
- 5.6. Even though an applicant may satisfy the specified criteria, he would be liable to disqualification if he has:
1. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the application for eligibility.
 2. Record of poor performance such as, slow progress of work, abandoning of work, not properly completing the contract, or financial failures/ weaknesses etc.
- 5.7. A list of eligible applicants whose financial bids will be opened shall be prepared and all concerned shall be intimated.
- 5.8. Earnest Money Deposit (EMD). The Earnest Money of the successful Tenderer will be taken as part of the Security Deposit as stipulated in Clause 1A of “General conditions of Contract”.
- 5.9. The employer reserves the right to accept or reject any application and to annul the qualification process / e-Tender process and reject all applications at any time without assigning any reason or incurring any liability to the applicants.

6. INFORMATION AND INSTRUCTIONS TO APPLICANTS

6.1. Definitions:

The following words and expressions have their meaning here by assigned to them.

1. EMPLOYER means IIT Madras, Chennai -36 acting through the Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC)
2. APPLICANT means individuals, proprietary firms, firm in partnership, limited company – private and Public Corporation
3. Engineer-in-charge means Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IITM
4. Tender means “**e-Tender**” which will be submitted online through dedicated website.

6.2 Information and Instructions

1. The applicant is advised to visit the site of work at his own cost and examine it and its surroundings and collect all information that he considers necessary for proper assessment of prospective assignment.
2. All information called for in the enclosed forms should be duly filled, signed, scanned and uploaded along with the e-Tender. If additional information needs to be uploaded in a separate document, reference to the same should be given against respective columns. Such separate documents shall be chronologically uploaded in the e-Tender website. If information is ‘nil’ it should also be mentioned as ‘nil’ or ‘no such case’. If any particulars/query is not applicable in case of the applicant, it should be stated as ‘not applicable’.
4. The applicants are cautioned that not giving complete information called for in the application forms required, not giving it in clear terms or making change in the prescribed forms or deliberately suppressing the information may result in the applicant being summarily disqualified.
5. The applicant may furnish any additional information, which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. However the applicants are also advised not to upload superfluous/ additional information beyond the requirements of the Bid. No information will be entertained after the application is submitted, unless it is called for by the Institute
6. Applications made by email, fax, and post or by person will not be considered

7. Documents submitted in connection with the tender will be treated as confidential and will not be returned.
8. Originals of all the scanned and uploaded documents as specified shall have to be submitted only by the lowest tenderer within a week physically in the office of Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras.
9. Contractor can upload documents in the form of PDF format. The size of individual file should not exceed more than 5MB.
10. Contractor must ensure to quote rate of each item.
11. Tenderers are requested to comply following instructions:
 - After submission of the online bid the contractor can re-submit revised online bid any number of times but before last date and time of submission of tender as notified.
 - While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
12. The rate (s) must be quoted in decimal coinage. Contractors must ensure to quote rate of each item. The column meant for quoting rate in figures appears in Cyan colour. 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).
13. The tender submitted shall become invalid if:
 1. The tenderer is found ineligible.
 2. The tenderer does not upload all documents as stipulated in the tender document including the undertaking about deposition of original Demand Draft (EMD) of the scanned copy of EMD (Original Demand Draft and Bank Guarantee) uploaded.
 3. If any discrepancy is noticed between the documents as uploaded at the time of submission of tender and hard copies as submitted physically by the lowest tenderer in the office of Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC)
14. No intimation shall be given to the lowest tenderer for submission of documents in the Office of Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras. Within seven days of Opening e-Bid 2 (Financial bid).

6.3 Authority to sign the application:

1. If an individual makes the application, it shall be signed by him above his full type-written name and current address.
2. If a proprietary firm makes the application, it shall be signed by the proprietor (with seal) above his full typewritten name & the full name of his firm with its current address.
3. If the application is made by a firm in partnership, it shall be signed (with seal) by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed along with current addresses of all the partners of the firm shall also accompany the application.
4. If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The applicant shall also furnish a copy of the Memorandum of Articles of association duly attested by a Public notary.

6.4. Clarification on tender document.

A prospective Tenderer requiring any clarification on the Tender Document may send their queries through email id. raju@ntcpwc.iitm.ac.in addressed to Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IITM at Chennai.

6.5. Pre-bid meeting.

NA

6.6. Amendment to tender documents

Before the deadline for submission of tenders, the tender document may be modified by issue of addenda. Any Addendum issued shall be part of the Tender Documents and shall be uploaded in the e-Tender website only. To give prospective Tenderers reasonable time in which to take the Addenda into account in preparing their tenders, extension of the deadline for submission of Tenders may be given as necessary.

6.7 Instructions for filling up the forms A, B, C, D, E & E1

1. Financial Information

The applicant should furnish the Annual financial statement for the last 5 years in form – A

2. Information about works

1. List of all works of similar class successfully completed during last the 7 years in Form – B
2. List of projects under execution or awarded in Form – C

3. Particulars of completed works and performance of applicant shall be duly authenticated / certified by an officer not below the rank of Executive Engineer in case of Government works or the Project Manager or an equivalent officer in case of non-governmental works separately for each work in Form - D

3. Information about the organization

Applicant is required to submit the following information in respect of his organization in form E and E1

1. Name and postal address including telephone and fax nos. etc. Copies of original documents defining the legal status, place of registration and principal places of business.
2. Names and titles of Directors and officers to be concerned with the work, with designation of individuals authorized to act for the organization.
3. Information on any litigation / arbitration in which the applicant was involved during the last five years including any current litigation / arbitration in process.
4. Authorization for employer to seek detailed references from clients to whom works were carried out.
5. Number of technical and administrative employees of the tenderer and how those employees would be involved in this work – Form E 1

4. Construction Plant and Machinery

Applicant should furnish the list of construction plant and equipment including shuttering, centering and scaffolding likely to be used for carrying out the work (in form F). Details of any other equipment not mentioned in form F but available with the applicant and likely to be used in this work may also be indicated

5. Letter of Transmittal

The applicant should submit the letter of transmittal as per the format attached.

7. OPENING OF FINANCIAL BIDS

- 7.1 The Financial bids (Tender) of the eligible applicants will be opened on the date and time to be intimated later.
- 7.2 Agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD 8 which forms part of e-Bid 2 (Financial bid)

8. FORMS

1. LETTER OF TRANSMITTAL

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

To

Principal Scientist,

National Technology Centre for Ports Waterways and Coasts (NTCPWC),
Room no 606, 6th Floor,
New Academic Complex,
Indian Institute of Technology Madras, Chennai – 600036

Name of work : Creation of Manned Submersible Experience Centre at National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai - Reg

Sir,

Having examined the details given in notice inviting qualification application and tender and the qualification documents for the above work, I/ We hereby submit the application for eligibility and the financial bid for the work duly filled in.

1. I / We here by certify that all the statement made and information supplied in the enclosed forms and accompanying statements are true and correct.
 2. I / We have furnished all information and details necessary for deciding our eligibility for taking part in the tendering process for the work. . We have no further information to supply.
 3. I / We also authorize the Principal Scientist to approach individuals, firms and corporations to verify our competence and general reputation.
 4. I / We submit the following certificates in support of our suitability, technical know how and capability for having successfully completed following works.
- | Name of work | Certificate from |
|---|------------------|
| 5. I/We certify that that the tender documents uploaded is the exact replica of the document published by the IITM and no alterations and additions have been made by me / us in the e-tender document. | |
| 6. I am / We are aware that the Financial bid submitted by me/us will not be opened if I / We do not become eligible after evaluation of my/our application for eligibility. | |
| 7. The Original Demand Draft (EMD) and Bank guarantee which was /were scanned and uploaded in the e-Tender shall be deposited by me/us with the Engineer-in-Charge in case I/we become the lowest tenderer within a week of the opening of financial bid. Otherwise department may reject the tender. | |
| 8. I/we certify that, the declaration as enclosed in Annexure I & Annexure II which were scanned and uploaded while submitting the e-Tender . | |

Seal of the Applicant

Date of submission

Signature(s) of the applicants

FINANCIAL INFORMATION**(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)**

Name of the Organisation : _____

PAN Number : _____

Financial Analysis –

Details to be furnished duly supported by figures in Balance Sheet / Profit and Loss Account for the last Five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income-Tax Department (Copies to be uploaded separately).

SI No	Details	Year ending 31 st March of 2023				
		2019	2020	2021	2022	2023
1	Gross annual turnover in construction work					
2	Profit (+) / Loss (-)					

SIGNATURE OF CHARTED ACCOUNTANT WITH SEAL

II. Income Tax PAN details (to be enclosed separately)

III. GST Registration Certificate

SIGNATURE OF APPLICANT (S)

FORM 'B'

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

**DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED DURING THE LAST SEVEN YEARS
ENDING BY 31st October 2023.**

SL NO	Name of work/project & location	Owner or sponsoring organizations	Agreement No	Scope of work *	Cost of work in Crores	Date of commencement as per contract	Stipulated Date of completion	Actual date of completion	Litigation/ Arbitration pending/ In progress with details	Name and Remarks address/ Tel No of Officer to whom	
1	2	3	4	5	6	7	8	9	10	11	12

* indicate Number of stories in super structure.

** Indicate gross amount claimed and amount awarded by the Arbitrator

Signature of Applicant(s)

In case of works carried out for private persons / Organizations copies TDS certificate along with copy of performance order and work order / Agreement should be enclosed. Private works with out TDS certificates shall not be considered for valuation.

FORM- B1

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

ADDITIONAL INFORMATION FOR COMPLETED WORKS

1. Name of work
2. Location
3. Client's name and address
4. Consultants name and address.
5. Scope of work.
 - a. Number of floors in Basement.
 - b. Number of floors in Superstructure.
 - c. Height of the building.
 - d. Plinth area / Built up area.
 - i. Basement.
 - ii. Superstructure
6. Type of foundation.
7. Type of Superstructure.
8. Time taken for
 - i. Foundation.
 - ii. Superstructure.
 - iii. Total Project.
9. Specialized service provided, with cost details, if available
(If any, specialized services provided through associate's - Particulars of the Associate's)
 - i. Communication, LAN.
 - ii. UPS.
 - iii. Water proofing Treatment
 - iv. Interior Design.
 - v. Fire Detection and Fire Fighting.
 - vi. Landscaping.
 - vii. Any other.
10. Specialized equipment deployed for the project.
11. Project Management organization structure.
12. Number of shift and its duration adopted in execution.
13. Systems adopted for timely completion of the project.

Additional information shall be uploaded separately

SIGNATURE OF APPLICANT(S)

FORM 'C'

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

PROJECTS UNDER EXECUTION OR AWARDED

SL NO	Name of work/project & location	Owner or sponsoring organizations	Agreement No	Cost of work	Date of commencement per contract	Stipulated Date of completion	Up to date percentage progress of work	Slow progress if any and reasons there of	Name and address/ Tel	Remarks(Indicate No of Officer cause notice issued or to whom Arbitration initiated reference during the progress of work)
1	2	3	4	5	6	7	8	9	10	11

Signature of Applicant(s)

FORM 'D'

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

PERFORMANCE REPORT FOR WORKS REFERRED TO IN FORM 'B' & 'C'

1. Name of the work / Project & Location.
2. Scope of work.
 - a. Number of floors in Basement.
 - b. Number of floors in Superstructure.
3. Agreement No.
4. Estimated Cost
5. Tendered Cost
6. Value of work done
7. Date of Start
8. Date of completion
 - i. Stipulated date of completion.
 - ii. Actual date of completion.
9. Amount of compensation levied for delayed Completion, if any.
10. Performance report based on Quality of Work, Time Management, and Resourcefulness : Very Good / Good / Fair or Satisfactory

DATE

**EXECUTIVE ENGINEER /
PROJECT MANAGER OR EQUIVALENT**

(*Signature and seal of the client / owner to whom the work executed)

* Certified by self will not be accepted

FORM 'E'

(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

STRUCTURE AND ORGANISATION

1. Name and address of the applicant
2. Telephone No./Fax No/E-Mail address.
3. Legal Status (attach copies of original document defining the legal status)
 - (a) An Individual
 - (b) A proprietary Firm
 - (c) A Firm in partnership
 - (d) A Limited Company or Corporation.
4. Particulars of registration with various Government bodies (Attach attested photo-copy)
 - a) Registration Number.
 - b) Organization / Place of registration
5. Names and Titles of Directors and officers with designation to be concerned with this work with Designation of individuals authorized to act for the organization.
6. Was the applicant ever required to suspend construction for a period of more than six months continuously after the construction was commenced?
If so, give the name of the project and give reasons thereof.
7. Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion?
If so, give the name of the project and give reasons thereof.
8. Has the applicant or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so, give details:
9. Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.
10. Field of specialization in Civil Engineering.
11. Any other information considered necessary but not included above.

* Additional information shall be uploaded separately

FORM 'E1'
(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED BY THE FIRM / COMPANY

SL NO	Designation	Total Number	Names	Qualification	Professional Experience	Length of continuous service with employer
1	2	3	4	5	6	7

Note : additional information about Technical personnel , if any , may be submitted on separate sheet.

Signature of Applicant(s)

FORM –‘F’
(To be duly filled, signed, scanned and uploaded along with e-Bid 1 by the tenderer)

DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN CARRYING OUT THE WORK.

SL NO	Name of the Equipment	Nos	Capacity or Type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	To be purchased	Leased		
1	2	3	4	5	6	7	8	9	10	11
1										
2										

ANNEXURE-I

(To be given on the letter head of the bidder)

No. _____

Dated:

CERTIFICATE

(Bidders from India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am not from such a country.

OR (*whichever is applicable*)

(Bidders from Country which shares a land border with India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I from _____ (Name of Country) and has been registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and is eligible to be considered. *(Copy/ evidence of valid registration by the Competent Authority is to be attached)*

Place:

Date:

Signature of the Tenderer
Name & Address of the
Tenderer with Office Stamp

ANNEXURE-II

**FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PUBLIC PROCUREMENT POLICY
(PREFERENCE TO MAKE IN INDIA) 2017**

Tender Reference

Number:

Name of the item / Service:

Date:

I/We _____ S/o, D/o, W/o, ___ Resident of _____ Hereby
solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.

Tick (✓) and Fill the Appropriate Category	
<input type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 50% and come under “Class-I Local Supplier” category.
<input type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 20% but less than 50% and come under “Class-II Local Supplier” category.

The details of the location (s) at which the local value addition is made and the proportionate value of local content in

Percentage

Percentage of Local content: _____%** .

Place of the local content value calculated : _____

For and on behalf of **(Name of firm/entity)**

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority.

**** Services such as transportation, insurance, installation, commissioning, and training and after sales service support like AMC/CMC cannot be claimed as local value addition**

Certified that the Application for Eligibility as published on the e-Tender website contains 25 pages only.

Principal Scientist,
National Technology Centre for Ports Waterways and Coasts (NTCPWC),
Room no 606, 6th Floor,
New Academic Complex,
Indian Institute of Technology Madras, Chennai – 600036

Signature of the Contractor



INDIAN INSTITUTE OF TECHNOLOGY MADRAS

CHENNAI – 600 036

e-Bid – 2 FINANCIAL BID - Volume I

e-Tender No: OE/MURA/132/2024/MANSUBMER

Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), Indian Institute of Technology Madras, Chennai - 600 036 invites item rate e-Tenders, in two Bid system (Application for eligibility and financial bid) for the following work from the Tenderer who satisfy the Eligibility Criteria given below.

1. PARTICULARS OF WORK

1.	Name of work	Creation of Manned Submersible Experience Centre at National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai
2.	GEM NAR ID	GEM/GARPTS/16022024/M64OKLC9T2NO
3.	Earnest Money Deposit (EMD) : Scanned copy of Demand draft to be uploaded in web site.	Rs. 3,85,000/-
4.	Time period for completion	3 months
5.	Validity of the tender	120 days from the date of opening of the tender
6.	Last Date for Submission of e-Tender	26.02.2024 at 3.00 PM
7.	Date of Opening of the Eligibility document	27.02.2024 at 3.00 PM
8.	Date of opening of the financial bid	Will be intimated later to eligible Tenderer
9.	Address of the Engineer-in-Charge	Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), Room no 606, 6th Floor, New Academic Complex, Indian Institute of Technology Madras, Chennai – 600036.

Principal Scientist

Certified that no addition and deletion has been made to the tender documents downloaded from the e-Tender web site.

Signature of the Contractor



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI – 600 036
COVER 2 - FINANCIAL BID – VOLUME I
e-Tender No: OE/MURA/132/2024/MANSUBMER

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1.1 Deadline for submission of tender

e-Tenders can be uploaded in the e-tender website till the stipulated date and time of submission.

1.2. Address for communication

Principal Scientist,
National Technology Centre for Ports Waterways and Coasts (NTCPWC),
Room no 606, 6th Floor,
New Academic Complex,
Indian Institute of Technology Madras,
Chennai – 600036.

1.3 The Employer may extend the deadline for submission of e-Tenders by issuing an amendment in writing in which case all rights and obligations of the Employer and the Tenderer previously subject to the original deadline will be subject to new deadline. The amendment will be uploaded in the e-Tender website only.

2. e-TENDER

- 2.1. I/We have read and examined the notice inviting e-tender, schedules A & B, Specifications applicable, drawings, Conditions of contract and other documents and rules referred to in the conditions of contract and all other contents in the tender documents for the work.
- 2.2. I/We hereby tender for the execution of the work specified for the Indian Institute of Technology Madras, within the time specified in Schedule – ‘F’ and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in General Rules and Directions and in Clause 11 of Form 8 (General conditions of contract) and with such materials as are provided for, and in all respects in accordance with such conditions applicable.
- 2.3. I/We agree to keep the tender open for Ninety (120) days from the date of opening of tender and not to make any modifications in its terms and conditions
- 2.4 I/We agree that the EMD deposited by me/us be retained by IITM towards Security Deposit to ensure execution of all works referred to in the tender documents on the terms and conditions contained or referred to therein.
- 2.5 If I/We fail to furnish the prescribed performance guarantee as mentioned elsewhere within the prescribed period, I/we agree that IITM shall, without prejudice to any other right or remedy, be at liberty to forfeit the said performance guarantee absolutely.
- 2.6 I/we agree that in case of forfeiture of tender, I/we shall be debarred from participating in the re-tendering process of the work.
- 2.7. If I/we fail to commence work as specified in Clause 3A of the contract, I/we agree that IITM shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely.
- 2.8. I/We agree to carry out such deviations as may be ordered, up to a maximum percentage mentioned in Schedule ‘F’ and 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 contract.
- 2.9. 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 the information derived therefrom to any person other than a person to

whom I/we am / are authorised to communicate the same or use the information in any manner prejudicial to the safety of the State.

2.10. I/We hereby certify that the e-tender document uploaded is the exact copy of the document published by the IITM and no alterations and additions have been made by me / us in the e-tender document.

Contractor

Dated

Signature of the Tenderer

Postal Address

Witness

Signature

Name

Postal Address

Occupation

3. Acceptance

The above e-Tender is accepted by me for an on behalf of the Director, IITM for a sum of

Rs. _____ (Rupees _____

_____)

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

- a)
- b)
- c)

For & on behalf of the Director, IITM.

Signature _____

Designation _____

Date _____

4. Conditions of contract

4.1. Definitions

In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

1. The expression 'works' or 'work' shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed, whether temporary or permanent, and whether original, altered, substituted or additional.
2. The 'Site' shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
3. The 'contractor' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
4. The 'Engineer-in-charge' means the Engineer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of IIT as mentioned in Schedule 'F' hereunder.
5. 'Accepting Authority' shall mean the authority mentioned in Schedule.
6. 'Excepted Risks' are riots (other than those on account of contractor's employees), war, acts of God such as earthquake, lightning and unprecedented floods, and other such causes over which the contractor has no control and accepted as such by the Accepting Authority.
7. 'Market Rate' shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover all overheads and profits.
8. 'Schedules(s)' referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard schedule of Rates of the CPWD mentioned in schedule 'F' hereunder, with the amendments thereto issued up to the date of receipt of the tender.
9. 'Department' means IITM which invites the tenders.
10. 'District specification' means the specifications followed by the state of Tamil Nadu in the area where the work is to be executed.

11. 'Tendered value' means the value of the entire work as stipulated in the letter of award.
12. 'Employer means IITM
13. Where the context so requires, words imparting the singular also include the plural and vice versa. Any reference to masculine gender shall whenever required shall refer to feminine gender and vice versa.
14. Wherever the expression "Divisional Officer" appears in the Clauses, it should be substituted by the expression "Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras".
15. "Engineer in Charge" means Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras, and the Engineer means the officer representing the Engineer-in-Charge of the Project.
16. Executive engineer means Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras.
17. Superintending Engineer means Professor In-charge, NTCPWC, IITM

4.2. Authority to sign the tender document

The tender must be signed by the person / persons competent to sign as indicated below. Same stipulations will also apply in the case of Receipt of payments for the work done.

1. If the Applicant is an individual, he should sign above his full typewritten name and current address.
2. If the Applicant is a proprietary firm, the Proprietor should sign above his full typewritten name and the full name of his firm with its current address.
3. If the Applicant is a firm in partnership, the Documents should be signed by all the Partners of the firm above their full typewritten names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the tender documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
4. If the Applicant is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The Applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary

4.3 Instructions for filling the Bill of Quantities (Schedule A & B)

The spread sheet containing the Bill of Quantity shall be downloaded from the above web site and the same shall be uploaded to the e-Tender website after filling the rates. The file name of the spread sheet document which is downloaded from the e-Tender web site should not be changed in any case.

1. The rate (s) must be quoted in decimal coinage. Contractors must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
2. 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
3. Tenders containing proposal for any alteration in the work or in the time allowed for carrying out the work, or which contain any other condition including conditional rebates, will be summarily rejected.
4. The officer inviting tenders shall have the right to reject all or any of the tenders and will not be bound to accept the lowest or any other tender.
5. The tender for the work shall not be witnessed by a Contractor or Contractors who himself / themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the Contractor tendering, as well as witnessing the tender, liable to summary rejection.
6. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such tender is liable to be rejected.
7. The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.

4.4. Refund / forfeiture of EMD

1. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to that Contractor.

2. Tender for the work shall remain open for acceptance for a period of 12 days from the date of opening of the Tender.
3. If lowest tenderer withdraws his tender before the said period or issue of acceptance, whichever is earlier or makes any modification in the terms and conditions of the tender which are not acceptable to the Institute, then IITM, shall without prejudice to any other right or remedy, be at liberty to forfeit 50 % of the said earnest money.

4.5. Documents to be submitted upon acceptance of the tender.

1. 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.
2. The Contractor shall give a list of IITM employees related to him.

4.6 Signing of Agreement.

1. The successful contractor on acceptance of his tender shall, within 14 days from the stipulated date of start of the work, sign the contract.
2. Documents constituting the contract
 - a. Non judicial stamp paper for value not less than Rs.100 containing the brief description of the contract duly signed by both parties to the contract.
 - b. The notice inviting e-tender, the financial bid including BOQ and all other documents including drawings, if any, forming the tender as issued at the time of invitation of e-tender and acceptance thereof together with any correspondence leading thereto.
 - c. Letter of acceptance
 - d. Letter of award (After submission of Performance Guarantee)

4.7 Special conditions

1. All the tenderers should ensure that they are GST compliant and the quoted rates are as per GST Law. The Tenderer should submit their GST registration certificate while uploading the tender document.
2. If the tenderer fails to upload GST Registration certificate, the tender will be summarily rejected.
3. The rate quoted shall be inclusive of all applicable taxes including GST prevailing on the date closing of tender. However, the rate of tax prevailing at the date of billing will only be paid based on submission of tax invoice as per GST rules.

4. The e-tender is item rate e-tender. The tenderer are requested to enter their rates for each item in the prescribed cell in the BOQ excel sheet.
5. The rate quoted shall be inclusive of all applicable taxes including GST.
6. Child Labour is strictly prohibited.
7. Construction labour shall not be permitted (except staff for watch and ward) to stay inside the campus and no labour camp shall be allowed to be set up inside the campus.
8. The construction activities and storage of materials shall be restricted within the area earmarked around the proposed building, which shall be barricaded with materials approved by IITM.
9. The contractor shall abide by the restrictions imposed by the security wing of the National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai on the working and movement of labour, materials etc. and nothing extra shall be payable on this account. The contractor shall arrange for necessary photo identity passes for the labour for entry into the campus. Advance action for obtaining such passes shall be taken by the contractor and no claim on this account shall be entrained.
10. Movement of labour should be restricted to the areas where work is carried out. Workers should be made to confine themselves to the work areas and should not wander into the near by areas / buildings/ forest.
11. The work should be executed during day time only. If the work is required to be carried out in the night, necessary permission of the Engineer-in-charge shall be obtained. Contractor will make his own arrangement for lighting the area and no extra amount for carrying out the work during night is payable. To the extent possible engaging women labour in the night shift should be avoided
12. The work shall be carried out with least hindrance to the adjoining buildings and offices and the contractor will be responsible for any damage, caused to the existing fixtures, electric fittings, cables, roads, pipelines etc. in the course of execution and the contractor shall make good any such damages for which nothing extra is payable.
13. Water for construction shall be arranged by the contractor. The contractor will not be allowed to use any of the water resources available within the campus nor will be permitted to dig any bore well inside the campus.

14. No plot rent shall be charged for materials stocked in the institute land during the course of construction with the prior approval the Engineer. All such materials shall be removed at the time of completion of the work.
15. The contractor shall make his own arrangement for electricity required during the construction period.
16. Tenderer shall inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not. Submission of a tender implies that the tenderer has read the complete contract documents and is aware of the conditions, specification of the work to be done and of the local conditions and other factors having a bearing on the execution of work. Any claim either for extra amount or for additional time for execution due to ignorance about the site and working condition is not payable.
17. All documents forming the contract shall be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scaled.
18. In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of precedence shall be observed.
 - i. Description of item in the Schedule of Quantities.
 - ii. Particular Specifications and special conditions, if any
 - iii. Drawings.
 - iv. C.P.W.D Specifications
 - v. Specifications of B.I.S.
19. If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the interpretation of the documents and his decision shall be final and binding on the contractor.
20. Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract. All such variations, errors, additions, substitutions etc shall be decided as per the terms of the contract

21. The building work shall be carried out complying in all respects with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid on this account.
22. The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per the local body bye-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work, if required.
23. Where CPWD specifications are not available for fittings and fixtures, the same should conform to bye-laws and specification of the local Body. The contractor should engage licensed plumbers for the work.
24. The contractor shall comply with all legal orders and directions of the local or public authority or municipality and abide by them.
25. The contractor shall give a performance test of the installation(s) as per specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
26. Any cement slurry added over base surface (or) for continuation of concreting to obtain better bond between old and new concrete is deemed to have been included in the items and nothing extra shall be payable or extra cement considered in consumption on this account
27. The Rate for RCC works includes cost of concreting in sloped & curved roof, chajjas & beams and no extra rate shall be payable for concreting in such situations.
28. The rate for Centering & shuttering under concrete items will be the same for Centering & shuttering in curves & arches also unless specified otherwise in the BOQ.
29. The contractor should construct proper mortar bands of lean mix with adequate depth & size over the roof for flooding with water & proper curing. In case of Arches, wet gunny bags shall be used for a period of two weeks.
30. Holes and chase for water supply and drainage, etc, shall be provided as directed during progress of work without any claim for extra for finishing
31. The rate quoted for tiling on walls shall include providing the bevel edges for the corners or the PVC corner strips. No additional payment shall be payable on this account.
32. Sample of all materials, fixtures, flooring tiles, wall tiles, doors, windows, sanitary fittings, roofing sheets electrical fittings etc, shall be got approved in advance from the Engineer-in-

Charge before taking up the respective work. The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving the materials and clearance of the same before their use in work.

33. The contractor shall be furnished, free of cost one certified copy of the contract documents except Standard Specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract
34. For any dispute arising out of this agreement, the legal jurisdiction will be at Chennai in Tamil Nadu only.
35. It is not binding on the competent authority to accept the lowest or any other tender and any or all the tenders received can be rejected without assigning any reason.
36. Canvassing whether directly or indirectly, in connection with tender is strictly prohibited and the tenders of the contractors who resort to canvassing will be liable to rejection.
37. The competent authority reserves the right to accept part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
38. The contractor shall associate an Electrical/HVAC/Fire fighting/ Water proofing/Antitermite contractor of the appropriate class to carry out the works. But it is the principal contractor who is responsible for completion of the work also as per contract. No agreement is created between the contractor associated by the tenderer and IITM in this regard.
39. Other agencies related to this project will also simultaneously execute their part of works and the contractor shall cooperate and allow smooth working of all such agencies. The contractor shall leave such holes, openings etc, for laying / burying of pipes, cable, conduits, clamps, boxes and hooks for fans etc. as may be required for other agencies. Conduits for electrical wiring shall be laid in such a way that they leave enough space for concreting and do not adversely affect the structural members. The rates quoted for the items of work are deemed to include charges for coordinating with all such agencies and nothing extra is payable on this account.
40. In clause 25 of GCC (Form 8), a dispute redressal committee has been constituted by IITM. The procedure for inviting Dispute Redressal Committee is to be done as per Clause 25.

4.8 General Conditions:

1. The particular specification for certain items in the Financial bid – Volume – II – Part 1 - Bill of Quantity (BOQ) is enclosed as Annexure and the same shall be read in conjunction with the corresponding specification given in the BOQ.
2. Site yard shall be barricaded as per the drawing approved by IIT Madras. Necessary payment will be made as per the rate quoted in the BOQ.
3. All marking and levelling shall be done only by using Total Station
4. Spillover of any construction materials / earth on the road surface should be cleared immediately.
5. No labour shall be allowed to stay in these premises except watch and ward as approved by the Engineer-in-charge. Contractor shall ensure the safety of the road users while transporting the construction materials. No spillage of materials on road will be permitted. Necessary penalty of Rs 5000/- will be imposed if the spillage is not cleaned immediately. The Contractor shall plan the shifting of materials during the lean traffic hours preferably do the same on night time to avoid disturbance to road users.
6. The contractors are requested to inspect the site before submission of tender documents.
7. IIT Madras will not supply water for construction and domestic requirements.
8. Electricity / power requirement shall be arranged by the contractor. Necessary temporary connections from local authority / DG set will be arranged by the contractor. No extra claim will be entertained for the same.
9. No trees and vegetation shall be cut by the contractor.
10. All construction activities and labour movements should be restricted within the area earmarked for these purpose.
11. No labour camp is allowed inside the campus.
12. Firewood collection is strictly prohibited.
13. All debris generated in the site premises / material yard should be removed and disposed outside the campus. Necessary approval from local authority shall be obtained by the contractor.
14. National Institute of Ocean Technology, NIOT Campus, Pallikaranai, Chennai traffic regulation and speed limit should be followed without any violation.

15. In case of violation of any rules by the contractor, penalty will be levied by IIT Madras at the following rate.

Sl.No	Operations	Penalty per day
1	Construction labour shed without approval from Engineer-in-charge	Rs5000/- per shed per day
2	Labour wander in to the nearby areas / buildings / forests.	Rs500/- per person
3	Thrown food items / waste / package item inside or outside the site premises.	Rs1000 per day
4	If water stagnation inside the construction site.	Rs500 per day
5	Dumping of debris and storage of materials outside the barricaded area.	Rs25000 per day
6	Improper maintenance of barricade.	Rs5000 per day
7	Improper sanitation of labour toilets	Rs1000 per day
8	Collection of firewood	Rs2500 per day

Special Conditions (For ALL E & M Components)

- 1 The applicant should either himself meet the eligibility conditions for the respective E&M components or otherwise he will have to associate with agencies, fulfilling the eligibility requirements and hence consent letter from Associate Agency of the respective components of E&M work shall also be submitted as per attached Proforma after award of work to L1 bidder.
- 2 In case the main contractor is himself eligible (as per eligibility criteria) for executing any specific minor component and intends doing the job himself, he may not be required to associate with another agency for that minor component of work. In such cases the main contractor also has to submit the documents as per eligibility criteria mentioned for associated agency of individual E&M component.
- 3 The main tenderer have to submit the following documents for association of electrical contractor within one month of award of work or 15 days before start of work whichever is earlier.
 - (i) In support of the eligibility conditions of the proposed associated electrical contractor, copy of their registration documents, Electrical Contractor's License if any, PAN Card, duly attested by the applicants (Main Contractor) shall be submitted to the Principal Scientist, IITM for deciding the eligibility. Each such electrical contractor will certify that they are not debarred as on the day of application for sale of tender. Proposal for associating agency for minor components of work shall be submitted in Form- F of this tender document from each associate independently for all electrical and mechanical components.
 - (ii) The main contractor will submit MOU signed with himself/themselves and eligible class I registered/ enlisted contractor of IIT Madras. The MOU in the enclosed form shall be signed by both the parties' i.e. main contractor as 1st party and associated electrical contractor as per eligibility criteria as 2nd party (independently for all E&M components).
- 4 In the event of the concerned E&M agency not performing satisfactorily or failure of associate contractor to complete the E&M work, the main contractor on written directions of the Institute shall remove the Associate contractor deployed on the work and shall submit name of new associate who fulfill the conditions mentioned in NIT to execute the left over work without any loss of time or variation in cost to the Institute. Such associates shall also give an undertaking along with the main tenderer that both of them shall stand guarantee for the equipments already supplied for which payment has been released by the Institute in part. If any equipment supplied

for the work, during the currency of the earlier Associate contractor and paid partly by the Dept., becomes redundant /not in a position to be installed and commissioned and put to beneficial use due to change in agency for execution of E&M work, the main contractor shall be liable for replacement of the equipment(s) at no cost to Institute. No change of Electrical Contractor will be allowed without prior approval of the Engineer-in-charge of the work.

- 5 The materials shall be procured only from the original equipment manufacturers/ authorized dealers of OEM. The contractor shall submit all documentary details in fulfillment of this conditions regarding procurement of materials including relevant test certificates.
- 6 It will be obligatory on the part of the contractor/tenderer to sign the tender documents for all the component parts.
- 7 The main contractor shall be responsible and liable for proper and complete execution of the Electrical work and ensure coordination and completion of both civil and electrical work.
- 8 The main contractor has to enter into MOU with contractor associated by him for execution of minor component.
- 9 The associate contractor shall attend the inspection of the work by the Engineer-in-Charge of E&M works as and when required.
- 10 The defect liability period for the entire work is one year, except for LED fittings. The warranty for LED fittings including driver is 5 (Five) years. Before finalization of the work, the main contractor has to obtain Security Deposit of 5% of the price quoted by him for SITC of LED fittings for the 5 years warranty period in acceptable form i.e. FDR/ Bank guarantee and submit the same to the concerned Principal Scientist. In case the firm fails to do so an amount of 5% of the price quoted by him for SITC of LED fittings will be deducted from the final bill. The LED Security Deposit will be released after completion of warranty period of 5 years to the main contractor, who have submitted the LED Security Deposit

S No	Component of E&M works	Estimated cost in Rs.	Eligibility
C1	Electrical	18.42 Lakhs	The main Contractor if himself / themselves are not CPWD Composite category and do not have electrical license, has to associate with contractor having valid electrical

			<p>license for execution of this sub head of work</p> <p>Three similar completed works each of value not less than Rs. 7.37 lakhs or</p> <p>Two similar completed works each of value not less than Rs. 11.05 lakhs or</p> <p>one similar completed work of value not less than Rs.14.74 lakhs Similar work shall mean "Internal Electrical Installation"</p>
C2	HVAC	10.29 Lakhs	<p>The main Contractor shall associate a) any firm who have executed similar works as given below with completion certificate issued by an officer not below the rank of Executive Engineer or equivalent.</p> <p>Three similar completed works each of value not less than Rs.4.11 lakhs or</p> <p>Two similar completed works each of value not less than Rs.6.17 lakhs or</p> <p>one similar completed work of value not less than Rs. 8.23 lakhs Similar work shall mean "SITC of HVAC"</p>
C3	Fire-Fighting	7.32 lakhs	<p>The main Contractor shall associate a) any firm who have executed similar works as given below with completion certificate issued by an officer not below the rank of Executive Engineer or equivalent.</p> <p>Three similar completed works each of value not less than Rs 2.93 lakhs or</p> <p>Two similar completed works each of value not less than Rs.4.39 lakhs or</p>

			one similar completed work of value not less than Rs. 5.85 lakhs Similar work shall mean "SITC of Firefighting"
C4	Lift	16.42 Lakhs	The main Contractor shall associate a) any firm who have executed similar works as given below with completion certificate issued by an officer not below the rank of Executive Engineer or equivalent. Three similar completed works each of value not less than Rs 6.57 lakhs or Two similar completed works each of value not less than Rs.9.85 lakhs or one similar completed work of value not less than Rs. 13.13 lakhs Similar work shall mean "SITC of Lift"

11 The applicant should either himself meet the eligibility conditions for the respective E&M packages or otherwise, he will have to associate an agency meeting the eligibility requirements as given in this tender document and submit the details as per Form —I given in Part C of this tender document within 30 days of award of work OR 15 days before start of minor component of work whichever is earlier. The applicant/ main contractor has to submit consent letters as per Form- G, given in Part C of this tender document at least one eligible associate agency of the respective component of E& M work for each of the component of E& M works by clearly indicating the component of work within 30 days of award of work OR 15 days before start of minor component of work whichever is earlier. The main contractor will execute MOU with eligible registered contractor of IIT Madras or Specialized agency for executing E&M works. The MOU in the enclosed form shall be signed by both the parties' i.e. main contractor 1st party and associated E & M contractor as per eligibility criteria as 2nd party (independently for all E&M components).

12 If the main contractor fails to associate agency for execution of minor components of work within 30 days of award of work OR 15 days before start of minor component of work

whichever is earlier or furnishes incomplete details or furnishes details of ineligible agencies even after the tenderer is given due opportunity, the entire scope of such component of work shall be withdrawn from the tender and the same shall be got executed by the Engineer-in – Charge at the risk and cost of the main contractor.

- 13 Verifiable completion certificates of the work, registration/approval documents as the case may be, duly attested by the applicant shall be submitted within 30 days of award of work OR 15 days before start of minor component of work whichever is earlier. Valid Electrical Contractor's license, as the case may be, duly attested by the applicant shall also be submitted within 30 days of award of work OR 15 days before start of minor component of work whichever is earlier

Form -F

CONSENT LETTER FROM ELIGIBLE ASSOCIATE AGENCY OF MINOR COMPONENT OF WORK
Construction of at IIT Madras, Chennai-36.

Sub Work 2:C1-Internal Electrical Installations, Fire Alarms,DATA & VOICE,CCTV,ACS & C2-HVAC.

I / We hereby give my consent to associate with M/s, for executing the minor component of work of (Mention category).

I / We will execute the work as per specifications and conditions of the agreement and as per directions of the Engineer –in-Charge for the corresponding minor work till the completion of the work.

I / We will be responsible for necessary action to handover the installations and for rectification of defects and repair during the maintenance / warranty period.

Also I / We will employ full time technically qualified Engineer / supervisor for the minor component of the work as required for the work. I / We will attend inspection of officers of the department as and when required.

Date:

Signature with Signature with
with
date of Major component
Contractor Address

Signature with Signature
Minor component
Contractor Address

Witness with address

Witness with address

(From major component contractor side)

(From minor component contractor side)

FORM –I

PROPOSAL FOR ELIGIBLE ASSOCIATING AGENCIES FOR MINOR COMPONENTS OF WORK

I/we hereby propose the following agencies as per mentioned against each for executing corresponding minor components of work. Their consent letter are also attached

Sl.No	Name of Associate contractor	Category and class of Registration	Enlistment copy/ completion certificate attached	Monetary Limit of work	Validity of Registration	Consent letter attached (Yes/No)
Electrical						
1						
2						
3						

Sl.No	Name of Associate contractor	Category and class of Registration	Enlistment copy/ completion certificate attached	Monetary Limit of work	Validity of Registration	Consent letter attached (Yes/No)
HVAC						
1						
2						
3						

Sl.No	Name of Associate contractor	Category and class of Registration	Enlistment copy/ completion certificate attached	Monetary Limit of work	Validity of Registration	Consent letter attached (Yes/No)
Fire-fighting						
1						
2						
3						

Sl.No	Name of Associate contractor	Category and class of Registration	Enlistment copy/ completion certificate attached	Monetary Limit of work	Validity of Registration	Consent letter attached (Yes/No)
Lift						
1						
2						
3						

Note: Self Attested photocopies of enlistment order, valid electrical contractor license, annual pre-qualification order, work experience certificates of each agency for each component of E&M work shall be submitted.

Signature of contractor

Form- "I" Memorandum of Understanding (MOU) (to be executed for each and every E&M component if the main contractor associates an agency)

Form- "I"

Memorandum of Understanding (MOU) (to be executed for each and every E&M component if the main contractor associates an agency)

1. M/s. (Name of the firm with full address), Henceforth called the main Contractor
2. M/s. (Name of the firm with full address), Henceforth called Associated Electrical Contractor or Electrical Contractor,
3. Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IITM , Chennai (For On and Behalf of Director, IIT Madras)

For the execution of Electrical Work: C/o (Electrical Component) as per schedule specifications, terms and conditions of the tender. We state that this Memorandum of Understanding (MOU) will be treated as an agreement and has legality as per Indian Contract Act (amended upto date) and the IIT Madras can enforce all the terms and conditions of the agreement for execution of the above work. Both the main contractor and Associated E & M Contractor shall be responsible for the execution of work as per the original agreement to the extent this MOU allows. The payment shall be made by the Institute to the main contractor only and it his responsibility to make payment to the associated agency at their agreed rates . In case of any dispute, either of the main contractor or associated contractor will go for mediation by the Engineer In charge and if not satisfied may appeal against the mediation to the Chairman(EU),IIT Madras. His decision shall be final and binding on both of the main contractor and associated contractor. We have agreed as under:

1. The associatedcontractor will execute all electrical works in the wholesome manner as per terms and conditions of the agreement.
2. The associated electrical contractor shall be liable for disciplinary action if he fails to discharge the action(s) and other legal action as per agreement.
3. All the machinery and equipments, tools and tackles required for execution of the electrical works, as per agreement, shall be the responsibility of the associated electrical contractor.
4. The site staff required for the electrical work shall be arranged by the associated electrical contractor as per terms and conditions of the agreement.
5. Site order book maintained for the said work shall be signed by the representative of the main contractor/ associated contractor or the main contractor/ associated contractor themselves.

1. SIGNATURE OF MAIN CONTRACTOR

Date

Place

2. SIGNATURE OF ASSOCIATED ELECTRICAL CONTRACTOR

Date

Place

GENERAL TERMS AND CONDITIONS APPLICABLE FOR ALL E&M COMPONENTS

1 GENERAL

1.1 The work shall be generally carried out in accordance with tender/bid specifications and the following specifications / rules.

- a) CPWD General Specifications for Electrical work Part I Internal – 2014, as amended upto date
- b) CPWD General Specifications for Electrical work Part II External - 1994, as amended upto date
- c) CPWD General Specifications for Electrical work Part IV Substation -2013, as amended upto date.
- d) General Specifications for Electrical Works (Part-III-LITS & Escalators) - 2003, as amended upto date.
- e) CPWD General Specifications for Electrical Works Part VII D.G. Sets - 2013, as amended upto date.
- f) General Specifications for Heating,Ventilation & Air-Conditioning(HVAC) - 2017.
- g) General Specifications for Electrical Works (Part-V-Wet riser & Sprinkler System) - 2006, as amended upto date.
- h) CPWD General Specifications for Electrical Works Part VI Fire Detection and Alarm System – 2018 as amended upto date..
- i) Commercial and Additional conditions for this work. j) The Indian Electricity Act, 2003, as amended upto date k) Indian Electricity Rules 1956 amended upto date

1.2 Order of Preference:

Should there be any difference or discrepancy between the description of items as given in the Schedule of Quantities, technical specifications for individual items of work (including additional and commercial conditions) and IS Codes etc., the following order of preference shall be followed:

- a) Schedule of quantities
- b) Commercial and Additional conditions for this work
- c) General Conditions of Contract for CPWD Works
- d) Drawings
- e) CPWD General Specifications
- f) Relevant IS or any other International code in case IS code is not available.

These Commercial and Additional conditions are to be read in conjunction with above and in case of variations, specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specifications and conditions, as the same are to be read along with schedule of quantities for the work.

1.3 This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, commissioning putting into operation of equipment of all E&M components of the tender

1.4 The tenderer should in his own interest visit the site and get familiarize with the site conditions before tendering.

1.5 No T &P shall be issued by the Department and nothing extra shall be paid on account of this.

2 COMMERCIAL CONDITIONS

2.1 Type of Contract: The work to be awarded by this tender shall be treated as indivisible works contract.

3 Income tax, work contract tax, labour cess & other statutory deductions etc. shall be made at source as per the prevalent laws. The deductions of Security Deposit, Income-Tax shall be done after calculation of the due payments and net payment shall be reduced accordingly.

4 RATES

The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including GST-works contract tax which is 12% as on date, & labour cess 1% and Income Tax as applicable), duties levies, octroi etc and all charges for packing forwarding, insurance, freight and delivery, installation, testing.

4.1 The rates quoted inclusive of Commissioning at site including temporary construction of storage, risks, overhead charges general liabilities/obligations and clearance from CEA/ Lift Inspectorate/ Fire department etc as required. However, the fee for the inspections by these departments shall be reimbursed/ borne by the department.

4.2 The department will not issue Octroi exemption certificate.

4.3 The contractor has to carry out maintenance as per manufacturer's standards for a period of 12 months from the date of handing over. Nothing extra shall be paid on this account.

5 COMPLETENESS OF TENDER

All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.

6 STORAGE AND CUSTODY OF MATERIALS

The space, if available, may be used for storage of sundry materials and erection equipments or else the agency has to make his own arrangements. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the department.

7 CARE OF THE BUILDING:

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

8 COMPLETION PERIOD

The completion period indicated in the tender documents is for the entire work of planning, designing, approval of drawings etc., arrangement of materials & equipments, delivery at site

including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

9 GUARANTEE

9.1 All equipments shall be guaranteed for a period of 12 months, from the date of taking over the installation by the department, against unsatisfactory performance and/or break down due to defective design, workmanship or material. The equipments or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in Charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in-charge in this regard shall be final & binding on the contractor.

9.2 The tender shall guarantee among other things, the following: a. Quality, strength and performance of the materials used as per manufacturers standards. b. Safe mechanical and electrical stress on all parts under all specified conditions of operation. c. Satisfactory operation during the maintenance period.

10 POWER SUPPLY: : IITM will extend temporary power supply for construction at the rate of Rs 12/ kWh or as per tariff variations of TANGEDCO. In case of powercut, the contractor should arrange alternate power source.

11 WATER SUPPLY: The contractor has to make its own arrangement for water supply required for execution of the work.

12 ACCEPTABLE MAKES OF VARIOUS EQUIPMENTS: The acceptable makes of various equipments/components/accessories have been indicated in "Acceptable Makes" appended with the tender documents. The tenderer shall work out the cost of the offer on this basis. Alternate makes are not acceptable.

13 DATA MANUAL AND DRAWINGS TO BE FURNISHED BY THE TENDERER:

13.1 After award of work

The successful tenderer would be required to submit the following drawings after award of work for approval before commencement of installation.

- a) General arrangement drawing of all equipments of E&M components as per individual E&M component
- b) Details of foundations for the equipments and the weights of assembled equipments.
- c) Any other drawings necessary for the job.

14 The successful tenderer should furnish well in advance three copies of detailed instructions and manuals of manufacturers for all items of equipments regarding installation, adjustments operation and maintenance including preventive maintenance & trouble shooting together with all the relevant data sheets, spare parts catalogue etc. all in triplicate.

15 EXTENT OF WORK

17.1 The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning, as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender document in connection with this contract as this is a turnkey job.

17.2 The cables and other items shall be brought at site after taking correct measurements.

15.3 In addition to supply, installation, testing and commissioning, of all E&M equipment, following works shall be deemed to be included within the scope of work to be executed by the tenderer as this is a turnkey job. a) Minor building works necessary for installation of equipments, foundation, making of opening in walls or in floors and restoring them to their original condition finish and necessary grouting etc. as required. b) All necessary supports may be arranged. c) Testing of PTs/CTs for metering & protection purpose & relay calibration & setting. d) Getting CEA inspection done & obtaining approval for energizing the installation. However, necessary fees for inspection shall be borne by the Department.

16 Exclusion and work to be done by other agencies:

The following shall be excluded from the scope of the work:

a) Major dismantling of any existing building work. b) Tree cutting.

17 INSPECTION AND TESTING

17.1 All major equipments shall be offered for initial inspection at manufacturer's works. The contractor will intimate the date of testing of equipments at the manufacturer's works before dispatch. The successful tenderer shall give advance notice of minimum two weeks regarding the dates proposed for such tests to the department's representative to facilitate his presence during testing. The Engineer-in-charge or his representative may witness such testing. The cost of the Engineer's visit to the factory will be borne by the Department. Equipments will be inspected at the manufacturer/ Authorized Dealers premises, before dispatch to the site by the contractor if so desired by the Engineer- in-charge. Engineer-in-charge at his discretion may waive of inspection at factory /at the manufacturer's works before dispatch.

17.2 Copies of all documents of routine and type test certificates of the equipment, carried out at the Manufacturer's premises shall be furnished to the Engineer-in-charge and consignee.

17.3 After completion of the work in all respects the contractor shall offer the installation for testing and operation.

18 COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS:

18.1 All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by this specification. In particular, the equipment and installation will comply with the following: i) Factories Act. ii) Indian Electricity Rules. iii) B.I.S. & other standards as applicable. iv) Workmen's compensation Act. v) Statutory norms prescribed by local bodies like CEA, Power Supply Co., etc.

18.2 After completion of the installation, the same shall be offered for inspection by the representatives of the Central Electricity Authority. The contractor will extend all help including test facilities to the representatives of CEA. The observations of CEA will be attended by the contractor. The installation will be commissioned only after getting clearance from CEA.

18.3 Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

19 INDEMNITY: The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

20 ERECTION TOOLS: No tools and tackles either for unloading or for shifting the equipments for erection purposes would be made available by the department. The successful tenderer shall make his own arrangement for all these facilities.

21 COOPERATION WITH OTHER AGENCIES: The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of buildings, if any, and exchange freely all technical information so as to make the execution of this work/contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the tenderer himself.

22 The work will be carried out with least disturbance during shifting & shut down taken in consultation with the client department.

23 INSURANCE AND STORAGE: All consignments are to be duly insured upto the destination from warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

(xxiv) VERIFICATION OF CORRECTNESS OF EQUIPMENT AT DESTINATION: The contractor shall have to produce all the relevant records to certify that the genuine equipments from the manufacturers has been supplied and erected.

(xxv) PAINTING: This shall include cost of painting of the entire installation. The major equipments like, L T panel, DG set, lifts, HVAC equipments, axial fans, cable trays etc. shall be factory final finish painted. The agency shall be required to do only touching to the damages caused to the painting during transportation, handling & installation at site, if there is no major damage to the painting. However hangers, supports etc. of cable tray etc. shall be painted with required shade including painting with two coats of anticorrosive primer paint at site.

26. TRAINING: The scope of works includes the on job technical training of two persons of Department at site. Nothing extra shall be payable on this account.

27. MAINTENANCE:

27.1 Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation. The maintenance, routine as well as preventive, for one year from the date of taking over the installation as per manufacturer's recommendation shall be carried out as per OEM standards.

(xxviii) Approval of drawings, makes and models of equipment/materials for all E&M components :

28.1 The agency shall submit drawings and details such as makes and models of the equipments/materials offered by him along with specifications for all E&M components to the Engineer-in-charge of the work, before ordering the equipment/materials for approval of the department.

28.2 The Engineer-in-charge shall scrutinize the proposal and approve the makes and models which are acceptable as per the schedule, specifications, conditions of the agreement and inform the agency for procurement. The approving authority shall be technical sanctioning authority of E&M component.

28.3 After approval of the equipment/materials by the department the agency shall procure the equipment/materials from the OEM/authorized distributor/dealer as the case may be:

(xxix) Adequate care that only tested and genuine materials of proper quality are used in work shall be ensured by firm.

The firm shall also ensure that:

Material will be ordered & delivered at site only with the prior approval of the department to ensure timely delivery. As and when the order is placed for the fittings/ fixtures, cables, switchgears, poles, other main items etc, its copy shall be endorsed to the Engineer-in-charge. The contractor will submit makes & brands of electrical fittings wires & cables, conduits and switchgears, rising mains, poles , outdoor fittings etc. of preferred make list as per tender documents for approval of Engineer-In-Charge whose decision will be final in the matter. The firm will be required to procure material directly from the manufacturer/ authorized dealers to ensure genuineness & quality and as per the approved makes only. Proof in this regard shall be submitted by the contractor if required by the department. Inspection at factory or at godown, as required, shall be arranged by the firm for a mutually agreed date. Delivery of material shall be taken up only with the consent of department, after clearance of the material. Department shall reserve the right to waive inspection in lieu of

suitable test certificate, at its discretion. All the materials to be supplied by the contractor shall be procured & brought to site as per requirement at site of work in consultation with department so that these materials are not damaged & their manufacturer's warrantee is not lost.

(xxx) Safety Codes & Statutory Regulations:

Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty of Rs.1000/- for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

Principal Scientist

5. SCHEDULES

Schedule 'A' - The Bill of Quantities enclosed in this document.

Schedule 'B' - Schedule of materials proposed to be issued to the tenderer - **NO MATERIAL SHALL BE ISSUED TO THE TENDERER BY IITM**

Schedule 'C' - Schedule of tools and plants proposed to be hired to the tenderer - **NO TOOLS AND PLANTS SHALL BE HIRED TO THE CONTRATOR BY IITM**

Schedule 'D' - Extra schedules for specific requirements / documents for the work, if any - Nil

Schedule 'E' - Price escalation will be as per CLAUSES –10C & 10CA of the agreement. Apart from these price escalations no other claim for escalation for execution of work during the period / extended period of the contract is payable. – Not applicable

Schedule 'F'

Name of work : Creation of Archive facility at Stilt floor in NAC-I building (Civil, Electrical, Precision AHU & FCUs, CCTV, Fire alarm, etc)

Estimated cost of work : Rs.192.50 Lakhs

Earnest money : Rs.3,85,000/-

Performance Guarantee : 5% of the tendered value

Security Deposit :2.5% of the tendered value

General Rules and Directions:

Officer inviting tender Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras

Maximum percentage for quantity of items work to be executed beyond which rates are to be

}
}

See below

determined in accordance with clause 12.2 and 12.3.

Definition

Engineer-in-charge Principal Scientist, National Technology Centre for Ports Waterways and Coasts (NTCPWC), IIT Madras

Accepting authority Professor In-charge, NTCPWC, IITM

Percentage on cost of material and labour to cover all overheads and profit 15%

Standard schedule of rates CPWD DSR 2023

Department IIT Madras

Standard CPWD contract form CPWD form 8 with upto date Modification and correction

Clause 1

(i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance in days. : 7 (seven)_Days

(ii) Maximum allowable extension beyond the period provided above : 7(Seven) Days.

Clause 2

Authority for levying compensation under clause 2. Professor In-charge, NTCPWC, IITM

Clause 2a

Whether clause 2a shall be applicable : Not applicable.

Clause 5

Number of days from the date of issue of

letter of acceptance for reckoning the date of start : 14 Days

Time allowed for execution of work : 3 months

Authority to give fair and reasonable

Extension of time for completion of work : Principal scientist

Rescheduling of milestone : Professor In-charge, NTCPWC, IITM

Shifting of date of start in case of delay in handing over of site: Professor In-charge, NTCPWC, IITM

Clause 7

Gross work to be done with net payment after adjustment of advances for material collected, if any, since the last such payments for being eligible to interim payment. } Rs 20 Lakhs or as approved by Engineer-in- Charge

Clause 10A - List of Testing equipments to be provided as listed in this Document

A. For Building Works

1. Balances :

- (i) 7 kg. to 10 kg. capacity, semi-self indicating type - accuracy 10 gm.
- (ii) 500 gm. capacity, semi-self indicating type - accuracy 1 gm.
- (iii) Pan balance- 5 kg. capacity - accuracy 10 gms.

2. Ovens-electrically operated, thermostatically controlled upto 110°C - sensitivity 1°C.

3. Sieves: as per IS 460-1962.

- (i) I.S. sieves - 450mm internal dia, of sizes 100 mm, 80 mm, 63mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75mm, complete with lid and pan.
- (ii) I.S. sieves- 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns, with lid and pan.

4. Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.

5. Equipment for slump test- Slump cone, steel plate, tamping rod, steel scale, scoop.

6. Dial gauges, 25 mm travel - 0.01 mm/division least count - 2nos.

7. 100 tonnes compression testing machine, electrical-cum manually operated.
8. Graduated measuring cylinders 200 ml capacity - 3 Nos.
9. Enamel trays (for efflorescence test for bricks).
 - (i) 300 mm × 250 mm × 40 mm- 2 nos.
 - (ii) Circular plates of 250 mm dia - 4 nos.

B. Field Testing Instruments

1. Steel tapes - 3 m, 15m & 30m
2. Vernier calipers
3. Micrometer screw 25 mm gauge
4. A good quality plumb bob
5. Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical
6. Wire gauge (circular type) disc
7. Foot rule
8. Long nylon thread
9. Rebound hammer for testing concrete
- 10 Dynamic penetrometer
11. Magnifying glass
12. Screw driver 30 cms long
13. Ball pin hammer, 100 gms
14. Plastic bags for taking samples
15. Moisture meter for timber
16. Earth resistance tests
17. Meggar

Whether Clause 10B (ii) shall be applicable :No

Clause 10 C and 10CA : Not applicable to this contract

Clause 10CC not applicable to this contract

Clause 11 Specification to be followed for execution of work

CPWD Specifications 2019 Volume I to II and revised CPWD Specifications up to date, General specifications for Electrical works part – I (internal) 2013, General specifications for Electrical works part-IV Sub Station 2013, CPWD General specifications for firefighting and wet riser system with up to date amendments.

Clause 12

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work (Excluding foundation)	}	30%
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Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work. } 100%

Clause 16

Competent Authority for Professor In-charge, NTCPWC, IITM
 deciding reduced rates for items which IITM
 are not as per specification

Clause 18

List of mandatory machineries, tools & plants to be deployed by the contractor
 List of mandatory machineries, tools & plants to be deployed by the contractor

1. Mini batching plant (weigh batching). This shall be installed inside the site premises / yard as approved by IITM and no separate yard will be allotted for the same.

2. Vibrators – 3 Nos

6. MS pipe scaffolding materials – for all the external faces of block

Clause 25 is applicable to this contract. Dispute Resolution Committee shall be constituted by the Director of IIT Madras.

Clause 32(i) Technical Personnel to be employed at site.

Designation	Minimum qualification and experience required	Discipline	Rate of recovery per month for non employment
Principal Technical Representative (Civil)	Graduate with 2 years experience or Diploma with 5 years experience - 1 No.	Civil	Rs. 15,000
Project Engineer	Graduate with 2 years experience or Diploma with 5 years experience 1 No.	MEP Engineer	Rs.15,000

6. ADDITIONAL SPECIFICATIONS

The additional specification given below is not substitute to CPWD specifications or IS specifications. These shall be read along with CPWD specifications or IS specifications.

6.1. GENERAL

1. The work shall be carried out using metric dimensions only and shall be measured and paid in metric dimensions. F.P.S. units, if any, mentioned in drawings etc are for guidance only.
2. Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued thereto or revision thereof if any, up to the date of receipt of tenders.
3. Unless otherwise specified in the schedule of quantities the rates for the various items are for execution at all heights, levels and locations.
4. Unless otherwise specified in the schedule of quantities the rate for the items of the work shall be considered as inclusive of pumping out or bailing out water during execution, if required, for which no extra payments will be made. This will include water encountered from any source, such as rains, floods, sub-soil water table being high or due to any other cause whatsoever.

6.2. FLY ASH CONCRETE BLOCK

1. GENERAL

- a. Terminology Connected with this work shall be same as those applicable for Brick Work
- b. The contractor whose tender is accepted shall furnish the name(s) of the manufacturer from whom he proposes to procure the blocks and get the same approved from the Engineer in Charge before procuring the material. The Engineer in Charge may inspect / get inspected the factory from where the contractor proposes to procure the blocks before accord of approval. The contractor shall arrange for the inspections.
- c. The contractor shall furnish the following and obtain prior approval of the Engineer before procuring the blocks

- i. The size and grading of stone aggregate to be used
 - ii. The grading of fine aggregate
 - iii. Details of fines obtained from stone crushing proposed to be used in the manufacture of the blocks
 - iv. The type of cement proposed to be used
 - v. The type of fly ash proposed to be used and % proposed
 - vi. Details of additives etc if any to be used.
-
- d. The proportion of the ingredients may be decided by the contractor / manufacturer to obtain the required strength and other required qualities and got approved in advance.
 - e. Concrete Blocks shall be manufactured in a factory equipped with weigh batching arrangements for weighing the various ingredients and the blocks shall be manufactured using machinery equipped with vibratory / mechanical compaction arrangements.
 - f. The blocks shall have smooth rectangular faces with sharp corners and shall be uniform in colour and shall emit a ringing sound when struck
 - g. Necessary quality control and testing facilities should be available in the factory for conducting routine tests on each batch of the blocks and necessary records should be available.

2. Dimension of the Blocks

The blocks shall be of size 225 x 115 x 70 MM

The blocks shall be tested as per procedure detailed in IS 2185 (Part I) – 2005

The tolerances shall be as given below

Length = +or - 5MM

Width / Thickness = + or – 3 MM

3. Strength of the Blocks

The class designation of the blocks shall be M10. The average compressive strength shall not be less than 10 N per sqmm and strength of individual units shall not be less than 8 N per sqmm. The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) - 2005

4. Water absorption

The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005 for water absorption and the absorption shall not exceed 10 %.

5. Drying Shrinkage

The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005. The drying shrinkage shall not exceed 0.06 %

6. Moisture Movement

The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005. The moisture movement shall not exceed 0.09 %

7. Masonry Work

The method of construction, the bonds, width of joints, curing, measurements, tolerances in masonry work, etc shall be as per CPWD specifications detailed for “Brick work”

6.3. WATER PROOFING TREATMENT

1. General:

All the water proofing treatment shall be got executed through one of the approved special agencies. The contractor shall furnish the following particulars immediately after the issue of acceptance of the tender by the department

- a. The name of specialized firm
- b. The trade names of the product, which would be used.
- c. List of works where the treatment had been used
- d. Quantity of chlorides and sulphides used in the product.

GUARANTEE FOR WATER PROOFING TREATMENT

- a. Five years guarantee in prescribed proforma attached shall be given by the contractor for the water proofing treatment.
- b. 10 %(ten percent) of the cost of the items pertaining to water proofing shall be retained as guarantee to watch the performance of work executed.
- c. However, half of this amount (withheld) would be released after 2 years from the date of completion of the work, if the performance of the water proofing works is satisfactory.
- d. The remaining with held amount shall be released after completion of 10 years from the date of completion of work, if the performance of the water proofing works is satisfactory.
- e. If any defect is noticed during the guarantee period, it should be rectified by the contractor within 7days of issuing of notice by Engineer-in-charge.
- f. If not attended to, the same shall be got done through other agency at the risk and cost of the contractor and recovery shall be effected from the amount retained towards guarantee.
- g. In any case the contractor and the specialist agency during the guarantee period shall inspect and examine the treatment once in every year and make good any defect observed and conform the same in writing.
- h. The security deposit can be released in full, if bank guarantee of equivalent amount, valid for the duration of the guarantee period, is produced and deposited with the Institute.

6.4. Electrical Conduits Laying

For fixing electrical conduits in walls the required chase should be cut using only electrically operated circular saw. Using of hammer and chisel is completely prohibited

6.5 Stainless steel handrail

Stainless steel, tubes, bars, etc., bright polished including matching stainless items such as plates, screws, etc., welding and forming units with best workmanship, set in position using special hardware, expansion fasteners of approved make, etc., in all floors and all levels, and without painting, all complete with SS 304 Stainless Steel and as per architectural drawings.

6.6. CONDITIONS FOR CEMENT AND STEEL BROUGHT BY THE TENDERER FOR USE IN THE WORK

CEMENT

The contractor shall procure OPC grade 53 / PPC super grade from reputed manufactures of cement having a production capacity of one million tones per annum or more, such as ACC, Ultratech (L & T), Ramco, Chettinad, Zuari, Birla, Cement Corporation of India, etc or any manufacturer approved by the Ministry of Industry, Government of India and holding license to use ISI Certification mark for their product whose name shall be got approved from the Engineer-in-Charge. The contractor may submit a list of cement manufactures whose product they propose to use. The Engineer-in-charge has right to accept or reject the names of the manufactures which the contractor propose to use in the work. No change in tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufactures given by the contractor, fully or partly.

Supply of cement shall be in 50 kg bags bearing manufacture's name and ISI marking.

Samples of cement arranged by the contractor shall be got tested in accordance with provisions of relevant BIS codes.

In case test results indicate that the cement arranged by the contractor does not confirm to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.

7. The cement shall be brought to site in bulk supply of approximately 100 tonnes or as decided by the Engineer- in- charge
8. The cement godown of the capacity to store a maximum of 4000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be done.

9. Double lock provision shall be made in the door of the cement go-down, the keys of one lock shall remain with the engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor.
10. The contractor shall be responsible for the watch and ward and safety of the cement go-down.
11. The contractor shall facilitate the inspection of the cement go-down by the Engineer-in-Charge or his authorized representative at any time
12. The contractor shall supply free of charge the cement required for testing.
13. The frequency and the details of the test shall be decided by the Engineer-in-Charge depending on the quantum of supply in each batch. The cost of tests shall be borne by the contractor /Institute in the manner indicated below
- 13.1 by the contractor, if the results show that the cement does not conform to the relevant BIS Code
- 13.2 by the Institute, if the results show that the cement conforms to relevant BIS Codes
14. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract.
15. The theoretical consumption of cement shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid there in.
16. Items for which standard coefficients of cement consumption are not available in DSR 2012, the same shall be decided by the Engineer-in-charge.
17. If the cement consumed is less than the theoretical quantity (after allowing for wastage and variation) the cost of the cement consumed less at market rate plus 10% and cartage charges to site of work shall be recovered from contractor provided the work carried out is acceptable to the Institute.
18. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.
19. The cement bags shall be stacked on proper floors consisting of two layers of dry bricks laid on well consolidated earth at a level of at least one foot above ground level. The stacks shall be in rows of two and 10 bags high with a minimum of 0.6 m clear space all round. The bags should be placed horizontally continuous in each line actual size / shape of godown shall be as per site requirements and nothing shall be paid on this account.

20.The decision of Engineer-in-charge regarding the capacity of the godown shall be final.

21. Cement register for the cement shall be maintained at site. The account of daily receipt and issue of cement shall be maintained in register in the proforma prescribed and signed daily by the contractor or his authorized agent.

6.7. STEEL

6.7.1. The contractor shall procure steel/TMT reinforcement bars of grade Fe 500D conforming to relevant BIS codes from main producers (viz) SAIL, TISCO or RINL

6.7.2. The contractors shall have to obtain and furnish test certificate to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.

6.7.3 Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS codes.

6.7.4 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 with in a week's time from written orders from the Engineer-in-charge to do so.

6.7.5 The Steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more as decided by the Engineer-in-charge

6.7.6. 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 size and length shall be stored separately to facilitate easy counting and shifting.

6.7.7. For checking nominal mass, tensile strength, bend test, rebend test. Etc specimen of sufficient length shall be cut from each size of the bar at random at frequency not less then specified below.

Size of Bar	For Consignment below 100 tonnes	For Consignment over 100 tonnes
Under 10 mm dia	One sample for each 25 tonnes or part there of	One sample for each 40 tonnes or part there of
10mm to 16 mm	One sample for each 35 tonnes or part there of	One sample for each 45 tonnes or part there of
Over 16 mm dia	One sample for each 45 tonnes or part there of	One sample for each 50 tonnes or part there of

6.7.8. The contractor shall supply free of charge the steel required for the testing. The cost of test shall be borne by the contractor / Institute in the manner indicated below

- i. By the contractor, if the results show that the steel does not conform to relevant BIS codes
- ii. By the Institute if the results, show that the steel conforms to relevant BIS codes.

6.7.9. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid therein.

6.7.10. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

6.7.11. The standard section weights referred to as standard tables of CPWD Specifications shall be considered for conversions of length of various sizes of MS bars and cold Twisted bars/high yield strength deformed bars/thermo-mechanically treated bars into weight are as under

Size (dia in mm)	Weight in kg/m
6	0.222
8	0.395
10	0.617
12	0.888
16	1.579
18	1.999
20	2.467
22	2.985
25	3.855
28	4.836
32	6.316
36	7.994
40	9.869
45	12.490
50	15.424

6.7.12. For steel, measurement will be regulated on sectional weight basis, weight being calculated with help of above tables. The weight shall also be taken as per actual basis. If actual weight is found lower than the standard weight but within tolerance limits as per relevant IS codes, nothing extra shall be paid for over weight of steel section than given in the table.

- 6.7.13. The mild steel to be used shall conform to IS 432 - Cold twisted bars/High yield strength deformed bars and thermo-mechanically treated bars shall conform to IS 1786.
- 6.7.14. The contractor shall submit challan / bill / gate pass /cash memo in support of material purchased from manufactures/their authorized dealers/authorized producer.
- 6.7.15. Over the theoretical quantity of materials so computed, a variation shall be allowed as specified in schedule F.
- 6.7.16. If the quantities of materials actually used are less than the theoretical Quantities including authorized variations, the cost at market rates plus 10% including cartage to the site of such quantities of materials as determined by Engineer-in-charge, which shall be final and binding, shall be recovered from the contractor without prejudice to department rights/remedies available under the contractor, for action against substandard work.

7. STATUTORY REQUIREMENTS / APPROVAL FROM STATUTORY AUTHORITIES

Work for electrical installation shall be carried out in accordance with this specification and complying with the relevant statutory requirements and national standards. It shall be the responsibility of the contractor to obtain approvals of competent Central or State Government authorities and satisfy them regarding the compliance with relevant regulations for this scope of work.

The work should be carried out only under the supervision of licensed supervisors. The licenses possessed by the Contractor's supervisor shall be made available to the Client for scrutiny before commencement.

Test certificate for installation shall be prepared in the form required by the Electrical Inspectorate Govt. of Tamilnadu and Tamilnadu Electricity Board. Any rework on account of remarks by Electrical Inspector shall have to be carried out by the Electrical contractor at no extra cost.

8. Forms

8.1 Guarantee bond

Form of performance security (guarantee) Bank guarantee bond

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed agreement betweenand.....(hereinafter called "the said contractor (s))for the work..... (hereinafter called "the said agreement") having agreed to production of a irrevocable bank Guarantee for Rs.....(Rupees.....only) as security / guarantee from the contractor (s) for compliance of his obligations in accordance with the terms and condition in the said agreement.

- 1) We.....(hereinafter referred to as "the Bank") hereby (Indicate the name of the Bank) Undertake to pay to the Institute an amount not exceeding Rs.....(Rupees.....only) on demand by the Institute.

 - 2) We.....do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only)

 - 3) We, the said bank further undertake to pay to IITM 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 guarantee being absolute and unequivocal.
- The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.

- 4) We.....further agree that the guarantee herein (indicate the name of the bank) Contained shall remain in full force and effect during the period that would be taken for the said performance of the said agreement and that it shall continue to be enforceable till all the dues of the Institute under or by virtue of the said agreement have been fully paid and claims satisfied or discharged or till Engineer-in-charge on behalf of the Institute certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
- 5) We.....further agree with the Institute that (Indicate the name of the Bank) the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute 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.....lastly undertake not to revoke this (Indicate the name of the Bank) Guarantee except with the previous consent of the Institute in writing.
- 8) This guarantee shall be valid up to.....unless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.

Dated the.....day of.....for.....(Indicate the name of the Bank)

8.2. Form of guarantee bond for EMD

In consideration of the Indian Institute of Technology Madras (hereinafter called “The Institute”) Having offered to accept the terms and conditions of the proposed tender for the work ofhaving agreed to production of an irrevocable bank Guarantee for Rs.....(Rupees.....only) as security from the contractor (s) for compliance of his obligations in accordance with the terms and condition in the tender.

- 1) We..... (hereinafter referred to as “the Bank”) hereby (Indicate the name of the Bank) Undertake to pay to the Institute an amount not exceeding Rs.....(Rupees.....only) on demand by the Institute.
- 2) We.....do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupees.....only)
- 3) We, the said bank further undertake to pay to IITM 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 guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.
- 4) We.....further agree that the guarantee herein (indicate the name of the bank) Contained shall remain in full force during the **SIX months period.**

5) We.....further agree with the Institute that (Indicate the name of the Bank) the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute 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.....lastly undertake not to revoke this (Indicate the name of the Bank) Guarantee except with the previous consent of the Institute in writing.

8) This guarantee shall be valid up to **SIX months** unless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs..... (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.

Dated the.....day of.....for.....(Indicate the name of the Bank)

8.3 GUARANTEE TO BE EXECUTED BY TENDERERS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

The Agreement made this..... day of Two thousand andbetween Son of hereinafter called the guarantor of the one part and the Indian Institute of Technology (hereinafter called Institute) of the other part datedand made between the GUARANTOR OF THE ONE part and the Institute of the other part, whereby the contractor, inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak-proof.

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

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

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

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

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building waterproof at his cost to the satisfaction of the Engineer-in-charge and shall commence the work for such rectification with in 7 days from the date of issue of the notice by the Engineer-in-charge calling upon him to rectify the defects failing which

the work shall be got done by the Institute by some other contractor at the GUARANTOR'S cost and risk, and the decision of Engineer-in-charge as to the cost, payable by the guarantor shall be final and binding.

That if the guarantor fails to execute the water proofing or commits breach there under then the guarantor will indemnify the Institute against all loss, damage, cost, expense or otherwise which may be incurred by it by reason of any default on the part the GUARANTOR in formance and observance of this supplementary agreement. As to the amount of loss and or charge and / or cost incurred by the Institute the decision of the Engineer-in-charge will be final and binding on the parties.

IN WITNESS WHEREOF those present have been executed by the and by and for and on behalf of the Indian Institute of Technology Madras on the day, month and year first above written.

SIGNED SEALED and delivered by OBLIGOR in the presence of-

- 1.
- 2.

SIGNED For and on behalf of the Indian Institute of Technology Madras by.....in the presence of-

- 1.
- 2.

8.4 GUARANTEE BOND FOR ANTITERMITE TREATMENT WORKS

GURANTEE TO BE EXECUTED BY TENDERERS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF ANTITERMITE TREATMENT WORKS.

(On stamp paper of specified value)

THIS AGREEMENT is made on.....day of between Indian Institute of Technology Madras representing through Director hereinafter called the employer (which expression shall, wherever the context so demands or requires, includes their successor in office and assigns) of the one part, and M/s..... herein after called the contractor (which expression shall, wherever the context so demands or requires, includes his/her successor and assigns) of the other part.

WHEREAS this agreement is supplementary to the Contract Agreement (hereinafter called “the contractor”) no.....dated..... made between the Employer on the one part and the contractor of the other part, whereby the contractor, inter-alia, undertook to render the building and structure in the said contract rendered completely water and leak proof.

AND WHEREAS THE contractor agreed to give a guarantee to the effect that the said structure will remain without any termite for 10 years.

NOW THE contractor hereby guarantee that termite proof treatment given by him will render the structure completely termite proof and the minimum life of such termite proofing treatment shall be ten years to be reckoned from the date after the maintenance period prescribed in the contract is over.

The decision of the Employer with regard to cause of termite attack shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building termite proof to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification with in 7 days from the date of issue of the notice by the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Institute by some other contractor at the GUARANTOR’S

cost and risk, and the decision of Engineer-in-charge as to the cost, payable by the guarantor shall be final and binding.

That if the guarantor fails to execute the termite proofing or commits breach there under then the guarantor will indemnify the Institute and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part the GUARANTOR in formance and observance of this supplementary agreement. As to the amount of loss and or charge and / or cost incurred by the Institute the decision of the Engineer-in-charge will be final and binding on the parties.

IN WITNESS WHEREOF those present have been executed by theand by.....and for and on behalf of the Indian Institute of Technology Madras on the day, month and year first above written.

SIGNED SEALED and delivered by OBLIGOR in the presence of-

1.

2.

SIGNED For and on behalf of the Indian Institute of Technology Madras by.....in the presence of-

1.

2.

ANNEXURE-I

(To be given on the letter head of the bidder)

No. _____

Dated:

CERTIFICATE

(Bidders from India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am not from such a country.

OR (*whichever is applicable*)

(Bidders from Country which shares a land border with India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I from _____ (Name of Country) and has been registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and is eligible to be considered. *(Copy/ evidence of valid registration by the Competent Authority is to be attached)*

Place:

Signature of the Tenderer

Date:

Name & Address of the

Tenderer with Office Stamp

ANNEXURE-II

FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PUBLIC PROCUREMENT POLICY(PREFERENCE TO MAKE IN INDIA) 2017

Tender Reference

Number:

Name of the item / Service:

Date:

I/We _____ S/o, D/o, W/o, ____ Resident of _____ Hereby

solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide Gol Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020)MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and

That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.

Tick (✓) and Fill the Appropriate Category	
<input checked="" type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 50% and come under “Class-I Local Supplier” category.
<input type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 20% but less than 50% and come under “Class-II Local Supplier” category.

The details of the location (s) at which the local value addition is made and the proportionate value of local content in

Percentage

Percentage of Local content: _____%** .

Place of the local content value calculated : _____

For **and on behalf of** (Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority.

** Services such as transportation, insurance, installation, commissioning, and training and after sales service support like AMC/CMC cannot be claimed as local value addition

9. Special conditions

9.1. Protection of Environment

1. The debris / construction waste and other waste generated from the work spot should not be thrown inside the campus. All waste material should be taken out of the campus or should be dumped at a place earmarked by the Engineer in charge. All construction material should be stored only at places earmarked by the engineer in charge.
2. Material like cement, aggregate, steel etc should not be stored in buildings that are in use. If any material stored in unauthorized location the same shall got removed at the cost of contractor and necessary rent shall be levied for the area used for storage.
3. For Intercarting of various materials use of animal drawn vehicles are strictly prohibited.
4. Preparation of concrete, mortars in the roads, pavements, bare floors under the building is strictly prohibited.
5. While transporting the materials along the road, spillage of material should be avoided. If any spillage occurs, the same should be got cleaned immediately.
6. No vegetation inside the campus should be damaged.
7. Smoking is strictly prohibited at workplace.

10.0 Safety at the Site

1. The contractor must appoint a qualified person (full time) for taking care of implementation of Safety systems
2. The Contractor shall submit the **Project Safety Plan** stating the methodology of implementation of systems to ensure the safe and environment friendly work place. The Safety Plan must include the following.
 - a. Organization Chart
 - b. Reporting relationship of the safety enforcement personal in a flow chart
 - c. Safety Committee Structure – Chairman, secretary and committee members

10.1 Roles & Responsibilities of the Safety committee

1. Enforcement of applicable Statutory requirements, standards and codes related to safety and its adherence,
2. General safety rules and regulations concerning use of personal protective equipment and safety devices relevant to site activities, Awareness and Training Programs, Motivational schemes, programs for safe Access, Egress and workstation safety
3. Safe use of construction power supply and upkeep / maintenance of installations
4. Work permit systems
5. Use, maintenance and inspection of Plant & machinery
6. Scaffold & formwork norms
7. Use, maintenance and inspection of Lifting Tools
8. Fire Protection and prevention
9. Emergency preparedness

10.2 Status of Safety implementation at site will be discussed in the Weekly Review meeting. Contractor must submit the safety statistics every month in the enclosed format. Merit Certificate will be issued for the achievement of safety mile stones like 0.5 million safe man hours, one million safe man hours, 1.5 million safe man hours and so on.

10.3 The General Guidelines governing the safety implementation shall include the following Rules., while preparing the safety plan.

1. All the workmen shall undergo Safety Induction, screening before engaging them on the job. Physical fitness of the person to certain critical jobs like working at height or other dangerous locations to be ensured before engaging the person on work.
2. Sub-contractors shall ensure adequate supervision at workplace. They shall ensure that all persons working under them shall not create any hazard to self or to co-workers.
3. Nobody is allowed to work without wearing safety helmet. Chinstrap of safety helmet shall be always on. Drivers, helpers and operators are no exception.
4. All labour should be dressed properly attending to work wearing dhotis, lungies should be avoided to the extend possible.
5. The workmen shall wear suitable protection devices like mask, gloves, shoes etc,
6. No one is allowed to work at or more than three meters height without wearing safety belt and anchoring the lanyard of safety belt to firm support preferably at shoulder level.
7. No one is allowed to enter into workplace and work at site without adequate foot protection.
8. Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-coordinator insists eye protection has to be provided.
9. All PPE like Safety shoes, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.
10. All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.
11. Adequate illumination at workplace shall be ensured before starting the job at night.

12. All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded. Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
13. Erection zone and dismantling zone shall be barricaded and nobody will be allowed to stand under suspended loads.
14. Contractors should spray water using Water browser periodically in the site to reduce the dust rising due to wind.
15. Horseplay is completely prohibited at workplace. Running at the site is completely prohibited, except in the case of emergency.
16. Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the tre-passers from entering the area.
17. Other than electricians with red helmet no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.
18. All electrical connections shall be made using 3 or 4 core cables, having a earth wire.
19. Proper Earthling pits at site to be constructed. And the sensitivity must be maintained less than 1 ohm
20. Main panel boards should have MCB's and RCCB / ELCB's (30 mA sensitivity).
21. Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
22. All major, minor accidents and near misses to be recorded and reported to the IITM and the management must take necessary steps to avoid the recurrence.
23. Scaffoldings used should be of proper construction. No Casuarina pole / bamboo scaffolding is permitted. It should be inspected by competent person(s) before use
24. All tools and tackles shall be inspected before use. Defects to be rectified immediately. No lifting tackle to be used unless it is certified by the competent authority.
25. All tools and tackles shall be tested and have a Identification no., SWL and date of next test marked on them.
26. A tools and tackles inspection register must be maintained and updated regularly.
27. Good housekeeping to be maintained. Passages shall not be blocked with materials. Materials like bricks shall not be stacked to the dangerous height at workplace.
28. Must have a reverse horn on all the Earth moving vehicles and Equipments used at site.

29. Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work everyday.
30. Adequate fire fighting equipment shall be made available at workplace and persons are to be trained in fire fighting techniques with the co-ordination of site safety co-ordinator.
31. All the unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.
32. No children shall be allowed to enter the workplace.
33. Other than the Driver / operator, no one shall travel in a tractor / tough rider etc.
34. All the lifting tools and tackles shall be stored properly when not in use.
35. Clamps shall be used on Return cables to ensure proper earthing for welding works.
36. Return cables shall be used for earthing.
37. All the pressure gauges used in gas cutting apparatus shall be in good working condition.
38. Proper eye washing facilities shall be made in areas where chemicals are handled.
39. Connectors and hose clamps are used for making welding hose connections.
40. Proper warning boards and caution notices to be displayed at required areas inside the site.
41. All cranes must have a trained signal man for signaling.
42. All underground cables for supplying construction power shall be routed using conduit pipes.
43. Spill trays shall be used to contain the oil spills while transferring / storing them.
44. Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.
45. Any violation of above will attract levy of penalty by the engineer in charge on the contractor.

10.4. Safety Protocol for vehicles bringing in materials /equipment/removal of demolition waste/ debris and heavy vehicles into NIOT Campus

1. Within Campus, the Speed limit of 30 kmph should be strictly adhered to.
1. A copy of the invoice/delivery note shall be produced for authenticity at the INGATE.
2. The vehicle should have a reverse horn and blinkers and they should be in working condition. These will be checked at the entry into campus.
3. The red flags to be provided for materials/components extending from the vehicle's body and having potential for collision should be prominently displayed and in a way the visibility should be more than adequate. This shall be checked by the security at INGATE. The Security

guard shall also handover extract of the safety protocol to be followed to the Driver of the vehicle.

4. The vehicle should be accompanied by a Helper to the Driver. In cases of vehicles bringing into the campus, heavy equipment/single piece of material/components like steel, panels, prefabricated items etc., weighing more than 50 kg. The contractor's representative shall receive the vehicle at the INGATE, accompany it to the delivery point.

5. Roadside parking of vehicles including heavy vehicles needs to be strictly avoided to prevent accidents.

6. Carrying the pipes/ladders etc., in two wheelers is strictly not permitted.

7. While working with moving heavy equipment complete barricading needs to be done and labors are not allowed to use mobile phone at the site.

8. Overstaying of vehicle inside the campus will fetch penalty.

9. Protocols for loading /unloading: Prior to loading /unloading any vehicle, the driver should:

10.1 Switch off power and ensures that the wheels are chocked with chock blocks,

10.2 Ensure proper engaging of nose stands, if the trailer is engaged afresh,

10.3 Check the surrounding for a level ground free from obstacles and undulations to prevent jerking and shifting of loads leading to fall of material, before positioning the truck

10.4 Check again for possible obstructions before reversing.

10.5 The communication during positioning must be only between the driver and cleaner, cleaner to provide guidance.

10.6 Placing of traffic cones with adequate coverage area to divert other traffic or movement from delineated path.

10.7 Unloading the construction materials/components shall be stacked only at locations approved by the Engineer-in-charge and storing on the roadside is not permitted.

10.8 Crowding of people around the location should be strictly prohibited. Only authorised persons should be around the zone of operation.

10.9 Unloading of the components shall be done under the Direct supervision of the Safety Engineer of the contractor. A weekly report on the safety protocol followed in material handling and work carried out shall be submitted to the Engineer-in-charge.

10.10 While handling of components/materials, in case of a single piece of the item weighing more than 50 kg, the same shall be handled only by a suitable mechanical handling equipment approved by the Engineer-in-charge.

10.11 Inter-carting of construction materials within the campus shall be done with truck with proper covering and hazardous signage for materials like steel rod and pipes. Construction debris shall be covered while transporting within the campus to avoid spillage and dusting.

10.12 Engineer-in-charge shall bring the weekly non-compliance/safety report to the Professor In-charge, NTCPWC, IITM.

10.13 The supplier should avoid entering the campus between 7.30 am and 9 am to avoid crowding at the INGATE due to school commencement time.

10.14 Important points extracted from the above guidelines, including speed limit, can be handed over to the driver at the INGATE in the form of a pamphlet of A5 size

11. INSURANCE

1. Insurance of Works

The Contractor shall effect Contractor's all risk insurance policy (CAR policy) in the joint names of the Employer and the Contractor, the name of the former being placed first in the policy, covering the following:

- (a) The Works at the contract price together with the materials for incorporation in the works at their replacement value.
- (b) All plants and equipment and other things brought to the site by the Contractor at their replacement value.

The insurance shall be against all losses or damages from whatever causes, other than excepted risks, as defined in Clause 2 of Conditions of Contract, for which the Contractor is responsible under the Contract. The insurance cover shall be for the period of contract and also for the period of maintenance, for loss or damage arising from a cause prior to commencement of the period of maintenance, and for any loss or damage, occasioned by the Contractor in the course of any operations carried out for the purpose complying with his course of any operations carried out for the purpose of complying with his obligations during maintenance period under Clause 17 of Clauses of Contract. Such insurance shall be effected with an insurer and with terms

approved by the Employer. The Contractor shall, whenever required, produce the policy or policies and the receipts for payment of the current premiums.

2. Third Party Insurance

Before commencing the execution of the Works, the contractor shall insure against the liability for any material or physical damage, loss or injury which may occur to any property or life including that of the Employer or to any person, including any employee of the Employer, by or arising out of the execution of the works or in the carrying out of the Contract. The sum insured will be for Rs.5 lakhs. Such insurance shall be effected with an insurer and in terms approved by the Employer. The Contractor shall, whenever required, produce before the Engineer-in-charge the policy or policies of insurance and the receipts of payment of the current premiums.

3. Workmen's Insurance

The Employer's shall not be liable for any payment in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the Contractor or any sub-contractor, except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall insure against such liability with an insurer approved by the Employer for sum of the established norms during the entire period till completion of Period of Maintenance.

4. Recovery from the Contractor

Without prejudice for the other rights of the Employer against the Contractor in respect of default, the Employer shall be entitled to deduct from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.

5. Extension of time

The Contractor, in case of rebuilding or reinstatement, shall be entitled to such extension of time for completion as the Engineer-in-charge may deem fit, but shall, however not be entitled to reimbursement by the Employer of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein.

6. Insurance by Sub-Contractors

Without prejudice to his liability under this clause the Contractor shall also cause all Sub-Contractors to effect, for their respective portions of the works, similar policies of insurance in

accordance with the provisions of this clause and shall produce or cause to produce to the Employer such policies. The Contractor shall not permit a Sub-Contractor to commence work at the site unless the said insurance policies are submitted. In the event of failure of the Sub-Contractor to take out such a policy of insurance before commencing the works at the site, the Contractor shall be responsible for any claim or damage attributable to the said Sub-Contractor.

7. Period of Policies

All the insurance covers mentioned above shall be kept alive during the complete period of the contract. If the Contractor shall fail to effect and keep in force the insurance referred to above, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer on advice of the Engineer-in-Charge may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any moneys due or which may become due to the Contractor, or recover the same as debt due from the Contractor.

8. Damage to Persons and Property – Employer to be Indemnified

The Contractor shall indemnify the Employer against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the works or any part thereof.
- (b) The right of the Employer to execute the works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents, such part of the compensations as may be just and equitable having regard to the extent of the responsibility of the Employer, his servant or agent or other Contractors, for the damage or injury.

Signature of Contractor

Principal Scientist

12. Progress Reports

The contractor shall submit monthly progress report of the work in a computerized form. The progress report shall contain the following.

1. Construction schedule of the various components of the work through bar chart for the next 3 quarters, showing the milestones, targeted tasks and up to date progress.
2. Progress chart of the various components of the work that are planned and achieved for the month as well as cumulative up to the month with reasons for deviations, if any, in a tabular format.
3. Plant and machinery statement, indicating those deployed in the work, and their working status.
4. Man power statement, indicating the labour and staff employed in the work and the details of work carried out.
5. Financial statement, indicating the broad details of all the running account payments received up to date, such as gross value of work done. Advances taken, recoveries effected, amounts withheld, net payments, details of payments received, etc.
6. A statement showing the extra and substituted items submitted by the contractor and the payments received against them, items pending for sanctions / decisions by the Institute , broad details of the bank guarantees, indicating their validity period, broad details of the insurance policies taken by the contractor, if any, advances received and adjusted from the department etc.
7. Progress photographs in colour of the various items / components of the work done up to date to indicate visually the actual progress of the work.
8. Quality assurance and quality control tests conducted during the month with results thereof.
9. Safety report.
10. Other details asked for by the engineer-in-charge.

Proforma for Reports

Physical Progress

Name of Item	Quantity as per Agreement	Quantity executed during the month	Total up to date quantity executed	Anticipated balance quantity
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Financial Progress

Amount of work done during the month	Total amount of work done up to date	Anticipated amount of balance work
--------------------------------------	--------------------------------------	------------------------------------

TOTAL MANHOURS WORKED DURING THE MONTH

S . N	Description	Number	Man-hours worked	OT Performed	Total
1	Company Staff				
2	Subcontractor's Workmen (including security personnel)				
GRAND TOTAL OF MANHOURS WORKED DURING THE MONTH					

Total Man-hours worked since inception :

Safe man hours from last reported :

Lost time due to injury :

Details of Reportable Lost Time Injury

S N	Name of Injured	Date of Acci dent	Res um ed dut y on	Man days lost			Claim Status
				Up to last month (1)	This mont h (2)	Total (1+2)	

Man days Lost during the month (Cumulative of 2)

Number of Dangerous Occurrences : _____

No of Near Miss Cases : _____

Routed through

Site In charge

Site Safety Co-ordinator /Time Keeper

Signature: _____

Signature: _____

Date: _____

Date: _____

The contractor has to submit the progress report to the Engineer-in-Charge in triplicate by 10th day of every month as per the above proforma along with photographs of the work done during that month. The contractor shall be charged @ Rs.5000 (Rupees five thousand only) in the event of non-receipt of monthly progress report on due date (i.e. on 10th of every month) in the manner prescribed above. In case 10th day happens to be a closed holiday then the progress report will be submitted on the next working day.

A videography of the work should be undertaken at various stages of construction right from the day of start of work to date of completion / occupation covering all major events inspections etc. The videography shall be reviewed time to time by the Engineer in charge.

13.0 CPWD – Form 8 – Attached at the end

14.0 C.P.W.D. 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 1/4 to 1 (1/4 horizontal and 1 vertical.)
2. Scaffolding of staging more than 3.6 mt. (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 there of with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent 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. (11 1/2") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least 1/4" 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.

6a. Excavation and Trenching - All trenches of 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.

6(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 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 bore well properly

by welding steel plate, cover the bore well 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,

- a. All roads and open areas adjacent to the work site shall either be closed or suitably protected
- b. No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- c. All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned:- The following safety equipment shall invariably be provided.

- a. Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves and goggles.
- b. 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 gloves and goggles.
- c. Those engaged in welding works shall be provided with welder's protective eye-shields.
- d. Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- e. 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 atleast 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 :

(i)Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.

(ii)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.

(iii)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.

(iv)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.

(v)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.

(vi)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.

(vii)No smoking or open flames shall be allowed near the blocked manhole being cleaned.

(viii)The malba(debris) 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(debris).

(ix)Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.

(x)Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

(xi)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.

(xii)The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.

(xiii)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 tile limbs before working inside the sewer lines.

(xiv)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.

(xv)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.

(xvi)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.

f. 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:-

(i) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.

(ii) 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.

(iii) 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.

g. An additional clause (viii)(i) of Central Public Works Department Safety Code (iv) 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 :

- (i) 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.
- (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
- (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
- (v) Overall shall be worn by working painters during the whole of working period.
- (vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of C.P.W.D PWD(DA).
- (viii) C.P.W.D./PWD (DA) may require, when necessary medical examination of workers.
- (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

h. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

i. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :

- a. These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - b. Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
- ii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including

any scaffolding winch or give signals to operator.

iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

iv) The contractor shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work who may get it verified.

i. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating mats, wearing apparel, such as gloves, sleeves and boots 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.

j. 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.

k. 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.

l. 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 labour officer or

other department or Engineer-in-Charge or their representatives.

- m. 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.

1. APPLICATION

These rules shall apply to all buildings and construction works in IITM 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 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 equipments :-
1. 6 small sterilised dressings
 2. 3 medium size sterilized dressings.
 3. 3 large size sterilized dressings.
 4. 3 large sterilized burn dressings.
 5. 1 (30ml) bottle containing a two per cent alcoholic solution of iodine
 6. 1 (30 ml) bottle containing salvolatile 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
 10. 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 first-aid box shall contain the following equipments.

12 small sterilised dressings.

6 medium size sterilised dressings.

6 large size sterilised dressings.

6 large size sterilised burn dressings.

6 (15 gms.) packets sterilised cotton wool.

1 (60 ml.) bottle containing two per cent alcoholic solution iodine.

1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.

1 roll of adhesive plaster.

1 snake bite lancet.

1 (30 Gms) bottle of potassium permanganate crystals.

1 pair scissors

1 copy of the first-aid leaflet issued by the director General Factory Advice Service and labour Institutes / government of India.

A bottle containing 100 tablets (each of 5 Gms) of aspirin.

Ointment for burns.

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

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.

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.

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.

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

In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.

Separate and adequate cleaning facilities shall be provided for the use of male and female workers.

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:

Where female are employed there shall be at least one latrine for every 25 females.

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 non-absorbent 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) 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.

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 fifty 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 500 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 m (10ft.) 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 sq.m. (6 sft) 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

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.

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.

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.

The contractor shall provide one ayah 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 exceeds 50.

The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

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 is ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.

The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.

The canteen shall be sufficiently lighted at all times when any person has access to it.

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.

The premises of the canteen shall be maintained in a clean and sanitary condition.

Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

Suitable arrangements shall be made for the collection and disposal of garbage.

The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.

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 square meter (10 sft) 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 woman 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 equipments.

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 equipments provided for the canteen.

The cost of purchase, repairs and replacement of equipments including furniture, crockery, cutlery and utensils.

The water charges and other charges incurred for lighting and ventilation.

The interest and amounts spent on the provision and maintenance of equipments 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. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

Institute 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.

15.0 C.P.W.D. Contractor's Labour Regulations

1. SHORT TITLE

These regulations may be called the CPWD/PWD (DA Contractors Labour Regulations).

2. DEFINITIONS

1) Workman means any person employed by contractor directly or indirectly through a subcontractor with or without the knowledge of the Institute 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 18 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.

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 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

The contractor shall fix wage periods in respect of which wages shall be payable.

No wage period shall exceed one month.

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.

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.

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.

Wages due to every worker shall be paid to him direct or to other person authorised by him in this behalf.

All wages shall be paid in current coin or currency or in both.

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.

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.

It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Junior Engineer or any other authorised representative of the Engineer-in-Charge who will be required to be present at the place and time of disbursement of wages by the contractor to workmen.

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:

"Certified that the amount shown in column No has been paid to the workman concerned in my presence on at....."

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 impose 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. 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 anyone 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 installment, 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

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)

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).

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 may be convenient at the work place but the same shall include the following particulars :

Full particulars of the labourers who met with accident

Rate of wages

Sex

Age

Nature of accident and cause of accident

Time and date of accident

Date and time when admitted in Hospital

Date of discharge from the Hospital

Period of treatment and result of treatment.

Percentage of loss of earning capacity and disability as assessed by Medical officer.

Claim required to be paid under Workmen's Compensation Act.

Date of payment of compensation

Amount paid with details of the person to whom the same was paid.

Authority by whom the compensation was assessed.

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

The contractor shall issue an **Attendance card – cum – wage slip** to each workman employed by him in the specimen form at (Appendix-VII)

The card shall be valid for each wage period.

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.

The card shall remain in possession of the worker during the wage period under reference.

The contractor shall complete the wage slip portion of the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.

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 Institute in this behalf,

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The labour officer or any person authorised by Institute on their behalf shall have power to make enquiries 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 a decision has been given on such appeal

i) The Engineer-in-charge shall arrange payments to the labour concerned within 45 days from the receipt of the report.

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 Chairman (EU) concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Professor In-charge, NTCPCW, IITM concerned 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 :-

An officer of an association of employers of which he is a member

An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.

Where the employer 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 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 Professor In-charge, NTCPWC, IITM concerned shall be final.

REGISTER OF MATERNITY BENEFITS (Clause 19 F)

Name and address of the Contractor

Name and location of the work

Name of the Employee	Father's / Husband's Name	Nature of Employment	Period of actual employment	Date on which notice of confinement given
1	2	3	4	5
Date on which maternity leave commenced and ended				
Date of Delivery / miscarriage	In case of Delivery		In case of miscarriage	
	Commenced	Ended	Commenced	Ended
6	7	8	9	10
Leave pay paid to the employee				
In case of Delivery		In case of miscarriage		Remarks
Rate of leave pay	Amount paid	Rate of leave pay	Amount paid	
11	12	13	14	15

SPECIMEN FORM OF THE REGISTER, REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR IN CENTRAL PUBLIC WORKS DEPARTMENT WORKS.

Name and address of the contractor.....

Name and location of the work

Name of the woman and her husband's name.

Designation.

Date of appointment.

Date with months and years in which she is employed.

Date of discharge/dismissal, if any.

Date of production of certificates in respect of pregnancy.

Date on which the woman informs about the expected delivery.

Date of delivery/miscarriage/death

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

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

Date with amount of subsequent payment of maternity benefit.

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

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.

Signature of the contractor authenticating entries in the register.

Remarks column for the use of Inspecting Officer.

Appendix 'III'

LABOUR BOARD

Name of work

Name of Contractor

Address of Contractor

Name and address of. Division

Name of. Labour Officer

Address of Labour Officer

Name of Labour Enforcement Officer

Address of Labour Enforcement officer

Sl. No.	Category	Minimum wage fixed	Actual wage paid	Number present	Remarks

Weekly holiday

Wage period

Date of payment of wages

Working hours

Rest interval

Register of Workmen Employed by Contractor

Name and address of contractor

Name and address of establishment under which contract is carried on

Nature and location of work

Name and address of Principal Employer

Sl. No.	Name and surname of workman	Age and Sex	Father's/Husband's name	Nature of employment/designation	Permanent home address of the workman (Village and Tehsil, Taluk	Local address	Date of commencement of employment	Signature or thumb impression of the workman	Date of termination of employment	Reasons for terminations	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

Form-XVI (See Rule 78(2)(a))

Muster Roll

Name and address of contractor

Name and address of establishment under which contract is carried on

Nature and location of work

Name and address of Principal EmployerFor the Month of fortnight.....

Sl. No.	Name of Workman	Sex	Father's / Husband's name	Dates					Remarks
				1	2	3	4	5	
1	2	3	4	5					6
				1	2	3	4	5	

Form-XVII (See Rule 78(2) (a))

Register of wages

Name and address of contractor

Name and address of establishment under which contract is carried on

Name and location of work

Name and address of Principal Employerwages period: Monthly / Fortnightly

Sl.No	Name of Workman	Serial No. in the register of workman	Designation nature of work done	No. of days worked	Units of work done	Daily rate of wages/piece rate	Basic wages	Dearness allowances	Overtime	Other cash payments (indicate nature)	Total	Deductions if any, (indicate nature)	Nett amount paid	Signature or thumb impression of the	Initial of contractor or his representative
1	2	3	4	5	6	7	8	9	10	11		13	14	15	16

Wage Card No.

Wage Card

Name and address of contractor

Date of Issue

Name and location of work

Designation

Name of workman

Month / Fortnight

Rate of Wages

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Morning

Rate

Evening

Amount

Initial

Received from

a sum of Rs.

on account of my wages

The Wage card is valid for one month from the date of issue

Signature.

Employment card

Name and address of the contractor:

Name and address of the establishment under which contract is carried on:

Name of work and location of work:

Name and address of the principal employer:

Name of the workman:

Sl.no in the register of workman employed:

Nature of employment / designation:

Wage rate (with particulars of unit incase of piece work):

Wage period:

Tenure of employment:

Remarks:

Form-XV (See Rule 77)

Service Certificate

Name and address of contractor

Nature and location of work

Name and address of workman

Age or date of birth

Identification marks

Father's/ Husband's name

Name and address of establishment in under which contract is carried on

Name and address of Principal Employer

Sl. No.	Total period for which employed		Nature of work done	Rate of wages (with particulars of unit in case of piece work)	Remarks
	From	To			
1	2	3	4	5	6

Signature

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

Willful in-subordination or disobedience, whether alone or in combination with other.

Theft, fraud or dishonesty in connection with the contractors beside a business or property of Institute.

Taking or giving bribes or any legal gratifications.

Habitual late attendance.

Drunkenness lighting, riotous or disorderly or indifferent behavior.

Habitual negligence.

Smoking near or around the area where combustible or other materials are locked.

Habitual indiscipline.

Causing damage to work in the progress or to property of the Institute or of the contractor.

Sleeping on duty.

Malingering or slowing down work.

Giving of false information regarding name, age, father's name etc.

Habitual lose of wage cards supplied by the employer.

Unauthorized use of employer's property of manufacturing or making of unauthorized particles at the work place.

Bad workmanship in construction and maintenance by skilled workers, which is not approved by the Institute and for which the contractors are, compelled to take rectifications.

Making false complaints and / or misleading statements.

Engaging in trade within the premises of the establishments.

Any unauthorized divulgence of business affairs of the employees.

Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.

Holding meeting inside the premises without previous sanction of the employers.

Threatening or intimidating any workman or employer during the working hours with in the premises.

Appendix 'XI'

Form XII (See rule 78 (2) (d))

Register of Fines

Name and address of contractor

Name and address of establishment in under which contract is carried onNature and location of work Name and address of Principal Employer

Sl.No.	Name of Workman	Father's/Husband's name	Designation/nature of employment	Act/Omission of which fine imposed	Date of Offence	Whether workman showed cause against	name of person in whose presence	wage period and wages payable	Amount of fine imposed	Date on which fine realised	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

Form XX (See rule 78 (2) (d))

Register of Deduction for Damage or Loss

Name and address of contractor

Name and address of establishment in under which contract is carried onNature and location of workName and address of Principal Employer

Sl.No.	Name of Workman	Father's/Husband's name	Designation/nature of employment	Particulars of damage or loss	Date of damage or loss	Whether workman	name of person in whose	Amount of deduction	No. of installments	Date of recovery		Remarks
										1 ST installment	Last installment	
1	2	3	4	5	6	7	8	9	10	11	12	13

Form XXII (See rule 78 (2) (d))

Register of Advances

Name and address of contractor Name and address of establishment in under which contract is carried onNature and location of workName and address of Principal Employer

Sl.No.	Name of Workman	Father's/Husband's name	Designation/nature of employment	wage period and wages	Date and amount of	Purpose(s) for which Advance made	Number of installments by which advance	Date and amount of each installment	Date on which last installment was repaid	Remarks
1	2	3	4	5	6	7	8	9	10	11

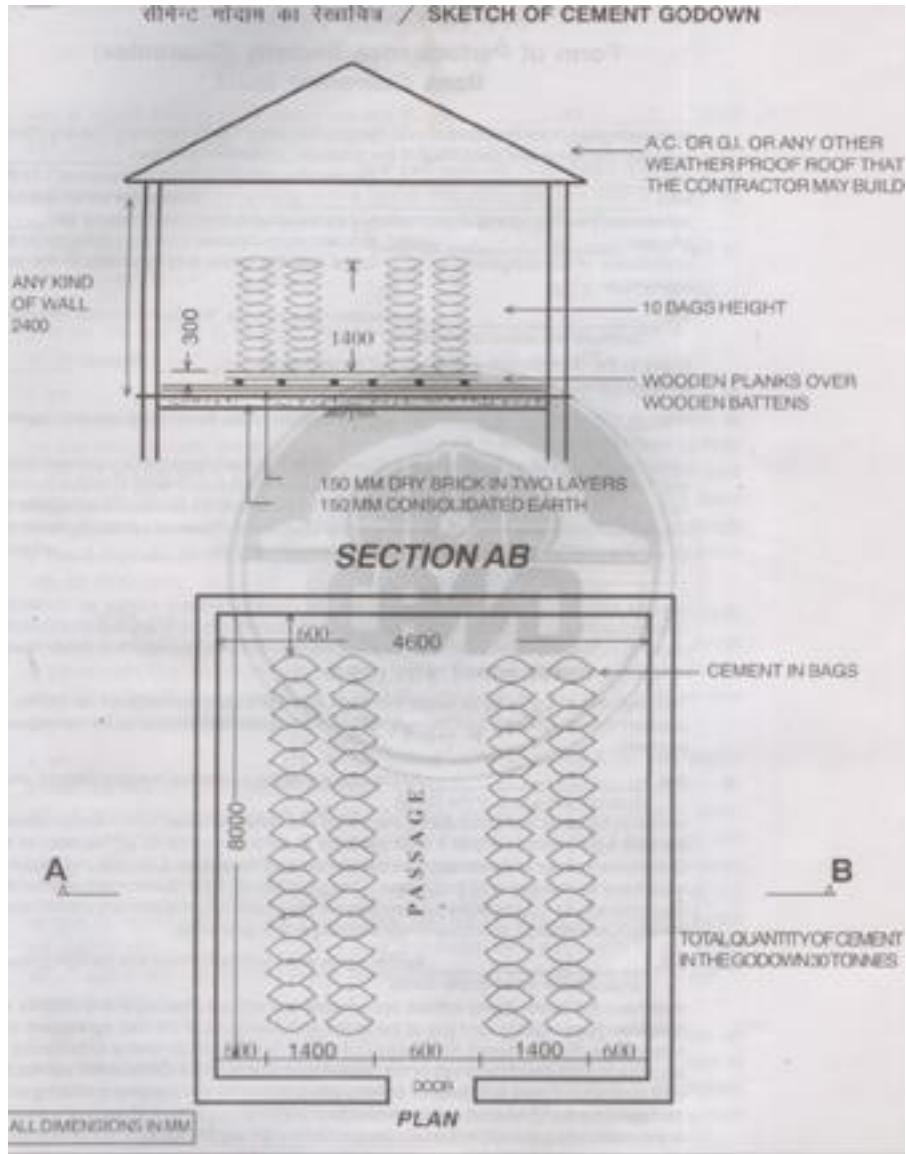
Form XXIII (See rule 78 (2) (e))

Register of Overtime

Name and address of contractorName and address of establishment in under which contract is carried onNature and location of workName and address of Principal Employer

Sl.No.	Name of Workman	Father's/Husband's name	Sex	Designation/nature of employment	Date on which Overtime worked	Total overtime worked or	Normal rate of wages	Overtime rate of wages	Overtime earnings	Rate on which overtime wages paid	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

I. SKETCH OF CEMENT GODOWN



16.0 LIST OF APPROVED MAKE / BRAND

16.1 IITM reserves the right to select any of the make/brand shown below and only those makes/brands will be allowed to be used in the work. Nothing extra is payable even if there is cost difference between one make/brand and another.

16.2 Civil Works

LIST OF APPROVED MAKE		
S.No.	Material	Make
1.	Ordinary Portland GREY Cement 53& 43 Grade	a Ultra tech b ACC c Birla Ambuja d Zuari e Chettinad
2.	Plain Portland Pozzolona (PPC)	a. Ultra tech b. ACC c. Birla Ambuja d. Zuari e. Chettinad
3.	Ready Mix concrete	a. ACC b. Ultra tech c. Lafarge d. Prism Johnson Limited, RMC (india) Division
4.	Water proofing Compound & Concrete admixture	a. BASF b. Fosroc c. Sika d. CIPY
5.	HYSD (TMT) Bars	a TISCO

LIST OF APPROVED MAKE		
S.No.	Material	Make
		b SAIL c RINL d JSW Neosteel
6.	Structural Steel	a. TISCO b. SAIL c. JINDAL
7.	Aluminum Sections	a. Hindalco b. INDAL c. JINDAL
8.	Paints	a Asian Paints b Berger c Nippon
9.	PVC Water Bars	a Fixopan b Syntex c BASF
10.	MS Pipe & Tubular sections	a. TISCO b. SAIL c. JINDAL
11.	Precast Cement concrete tile	a Nitco b Ultra c Johnson d Dura Crete
12.	Glazed Ceramic tiles	a. Johnson b. NITCO c. Somany d. Euro e. RAK

LIST OF APPROVED MAKE		
S.No.	Material	Make
13.	Glazed Ceramic designer tiles	a. Johnson b. Nitco c. Somany d. Euro e.RAK
14.	Vitrified tiles - full body/Double Charge	a Johnson b Euro c Somany d Nitco
15.	Vitrified tiles	a. Johnson b. Euro c. Somany c. Nitco
16.	Water proof cement paint	a. Snowcem India Ltd. b. Asian c. ICI
17.	Hardware	a Geze b Dorma c Lock wood
18.	Flush door	a. Jackson b. Green ply c. Kenwood
19.	Texture finish (External)	a. Asian Paints b. Berger a. Nippon

LIST OF APPROVED MAKE		
S.No.	Material	Make
20.	Texture finish (Internal)	a Asian Paints b Berger c Nippon
21.	Laminates	a. Century ply b. Archidply c. Merinolam d. Green ply
22.	Veneer	a. Jacson b. Archidply c. Century ply
23.	BWR Ply boards	a. Century ply b. Green ply c. Archid fly
24.	Fasteners	a. Hilti b. Fischner
25.	Fire Doors/Steel Doors	a. ShaktiMet b. System Schroders c. HORMANN
26.	XPS Boards	a. BASF b. Supreme c. Owns corning
27.	Lifts	a. Kone b. OTIS c. Schindler d. Mitusbishi.
28.	Polycarbonate sheets	a. SABIC b. Poly Clad c. Danpalon
29.	Roof insulation	a BASF

LIST OF APPROVED MAKE		
S.No.	Material	Make
		b Sika c Henkel system (Green tech engineers) d Lloyds
30.	Concrete Pavers	a Basant Beton b Astana c N.K.Ahamed
31.	External Modular drain	a. ACO
32.	Acrylic Solid surface	a. LG b. Luxor c. Corian c.Aspiron
33	Gypsum board	a.Saint Gobain b.Lafarge c.USG
34	Mineral fibre ceiling	a.Armstong b.AMF c. USG
35	Metallic ceiling	a.Armstrong b.Hunter Douglas c.Daiken d.Intertouch
36	Glass film	a.3M
37	Modular partition for toilets	a.Merino b.Stela tex c.Maica laminates
38	Adhesive	Fevicol SH/ Araldite of Hindustan

LIST OF APPROVED MAKE		
S.No.	Material	Make
		CIBA-Geigy Ltd/ Vamicol
39	Vinyl floor	Armstrong/LG/Tarket / Poly floor
40	Glazed Partition	JEB Asia / Raumplus/ Clestra
41	Clean Room Modular system	Rinac / Celstra
42	UPVC windows	Fenesta/AMD/Aluplast/Qute

LIST OF APPROVED MATERIALS PLUMBING & SANITARY		
S.No.	Description	Approved Make
1	SANITARYWARE	HINDWARE / KOHLER /PARRYWARE/METRO
2	STAINLESS STEEL SINK	PARRYWARE/DIAMOND /NIROLI
	LAB SINK	PARRYWARE
3	SENSOR	AOS SYSTEM / JAQUAR
4	WATER HEATER	ELAC/VENUS/TATA BPL
5	CP FITTINGS	JAQUAR/ESS ESS
6	CONCEALED FLUSH VALVE	JAQUAR/ESS ESS/GEM
7	U PVC SWR PIPE/FITTINGS	SUPREME/FINOLEX /PRINCE
8	CPVC PIPES AND FITTINGS	ASTRAL / ASHIRVAD / SUPREME
9	BALL VALVE	RB / LEADER / ZOLOTO
10	BUTTER FLY VALVE/CHECKVALE	LEADER / NORMEX /RB / ZOLOTO
11	Y' STRAINER	LEADER/NORMEX / RB
12	AIR RELEASE VALVES	VB / RB
13	NON RETURN VALVE	LEADER / NORMEX /RB / ZOLOTO
14	WATER SUPPLY PUMPS / SEWAGE PUMPS/DEWATERING PUMPS	GRUNDFOS/ KIRLOSKAR/TEXMO /ITT/KSB
15	SFRC COVER	GPI
16	CI GRATING	NECO
17	CP GRATING	SYSCRAFT GLOBAL ENTERPRISES (SGE) /AQUA
18	STONE WARE PIPES & GULLY TRAPS	PERFECT/ ANAND/ PARRY
19	BEVELLED EDGE MIRROR	ATUL/ MODI GUARD
20	SOLAR WATER HEATER	TATA BP, VENUS,GOOD SUN

16.3 ELECTRICAL

Sl.No.	DESCRIPTION	PREFERRED MAKES
1	MCCB	L&T / ABB / Siemens / Legrand
2	MCB	Legrand / L&T / ABB / Schneider
3	RCBO	Legrand / ABB / Schneider
4	MCB Distribution Board	Legrand / ABB / Schneider
5	Current Transformers	AE / KAPPA
6	Voltage Transformers	AE / KAPPA
7	Contactors & Starters	L&T / ABB / Siemens
8	Fuses & Fuse Bases	L&T / Siemens
9	Selector switches & Rotary switches	Kaycee / Salzer
10	Push buttons	Siemens / Salzer
11	Relays	ABB / TM
12	Timers	Legrand / Telmech
13	Indication lamps	L&T / Salzer / RAAS / RISHAB
14	Battery	Exide / Amaron
15	Indication instruments	AE / Conserve / HPL
16	KWHR meters	Conserve / HPL / BHEL / Siemens / L & T
17	Decorative Light Fixtures	Philips / Wipro / OSRAM / Crompton
18	Modular switches & sockets	Legrand/Havells/Anchor
19	Metal boxes	Legrand/Havells/Anchor
20	Ceiling Fans & Exhaust Fans	Crompton / GEC /USHA / Orient
21	Automatic source transfer switch	L&T / Socomac / Havells
22	Ceiling rose with three pin termination	Anchor / Lisha
23	Crimping type lugs	Dowells / Jainson
24	PVC Insulated copper wires	RR / Polycab / Finolex
25	PVC Rigid conduits	Aeroplast / Avonplast
26	MS Conduits	Javeri/Supreme / Bharat / Gupta / Precision
27	Industrial socket s with MCB	Legrand / Hensel / CG
28	Telephone cables	Delton / Finolex
29	Television / CCTV co-axial cable	Delton /Molex/ MX
30	CAT 5e / CAT 6 / CAT 6a cable	Camscope/D-link
31	Panels	CPRI approved panel builders
32	Digital meters	Elmeasure / IMP / AE
33	LT Cables	Polycab / Finolex / Havells / RR/ KEI
34	Terminal blocks	Elmex / Connectwell / Wago
35	Cable Glands	Dowells / Jainson

Sl.No.	DESCRIPTION	PREFERRED MAKES
36	Diesel Generator	Cummins / Cater pillar / Kirloskar
37	UPS	Fuji electric/Consul/Eaton/Emerson
38	Communication Cable tray	Legrand/OBO

16.4 FIRE FIGHTING

S.NO	EQUIPMENT/DESCRIPTION	APPROVED MAKES
1	Addressable Fire Alarm Panel	Edwards/ Honeywell
2	Addressable Type Detectors	Edwards/ Honeywell
3	Addressable Manual Call Point (Pull Station Type)	Edwards/ Honeywell
4	Sounders / Strobe	Edwards/ Honeywell
5	Addressable Relay Control Modules/ Monitor Modules	Edwards/ Honeywell
6	Response Indicators	Edwards/ Ravel
7	Power Cable	Universal / Polycab / Finolex
8	Control Cable	Polycab/Delton / Teleflex / Varsha
9	Ms Conduit (Isi Marked)	Bec / Akg / Vimco / Bharat
10	Fire Extinguisher	Safex / Cease Fire / Kanex
11	Photoluminescent Safety Signages	Glo-Lite / Auto Glo
12	Fire Sealant Material	Fire Master (Mmtcl) / 3M / Promat
13	Batteries	Exide / Amar Raja
14	Supports	Hitech / universal

16.5 HVAC

SL.NO	DESCRIPTION	PREFERRED MAKES
1	VRF unit	Toshiba/Mitsubishi/Daikin/BlueStar/LG
2	Thermal Insulation For Ducts	Zeco / Luftek/Thermoflux / Edgetec
3	Plenum for Ductable Units	Systemair / Thermoflux/ Edgetec
4	Sound Attenuators	Systemair / KC / Cosmioc
5	Insulation For Copper Pipe	Armaflex Class O / K flex Class O
6	Thermal Insulation for Ducts	Armaflex Class O / K flex Class O
7	Acoustic Insulation for Ducts	Armasound / K flex
8	Galvanized Sheet Steel / Aluminium Sheet	Tata / Sail / Jindal
9	Copper Pipes	Mexflow/Mandev/Rajco
10	Power / Shielded Cables for Communication	Finolex/Polycab/Havells
11	PVC Pipes	Finolex/Supreme
12	Grills / Diffusers	Cosmic/Airbreeze/Systemair
13	MCB & DB's	L&T / Siemen / ABB

SL.NO	DESCRIPTION	PREFERRED MAKES
14	Split Air conditioners (Inverter Type)	Toshiba/Mitsubishi/Daikin/BlueStar/LG
15	Pipe/duct supports	Hi-tech/Perfect supports
16	Dampers	Airmaster/Cosmic
17	Back Draft / Pressure Relief Damper	Airmaster/Cosmic/Trox
18	Flexible Ducts	Armaflex Class O/K flex Class/A flex Class O
19	Aluminium sheets	Indal/Jindal
20	Ducting system	Cosmic/KRI Ducts/7 star/Western Air Ducts
21	Filters	Spectrum/EMW/Swach/Dyna/Aerosol/AAF
22	Motors	KEC/ABB/Crompton/Siemens
23	Centrifugal fans	Comefri/Nicotra/Kruger/Greenheck

16.6 Lifts

- a. Kone
- b. OTIS
- c. Schindler
- d. Mitusbishi
- e. Jhonson

Note :

1. If any item is missing in the above list its make will be decided by the Engineer-in-charge.
2. The Successful tenderer shall submit test reports for all the materials / equipments. If any make is not in accordance with the tender specification it will not be accepted even if the make is indicated in the above List.
3. The IIT Madras reserves the right to reject or accept any of the make given above without assigning any reasons & bound to supply other brands in the list.
4. Any reputed make, the samples shall be submitted and got approval from IIT Madras.

17. BILL OF QUANTITIES

(For Items of works Refer Volume II (Part 1 & 2) of Financial bid)

- 1) e-Bid – 2 and the spread sheet containing the Bill of Quantity can be downloaded from the e-Tender web site and the same shall be uploaded to the e-Tender website after filling the rates. The file name of the spread sheet document downloaded from the e-Tender web site should not be changed in any case.

Signature of the Contractor

Principal Scientist (Civil)

13.CPWD FORM 8
CLAUSES OF CONTRACT

CPWD FORM 8

CLAUSES OF CONTRACT

<p>Performance Guarantee</p>	<p>CLAUSE 1</p>
	<p>(i) The contractor shall submit an irrevocable Performance Guarantee of 3% (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 Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto.</p> <p>The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days 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.</p> <p>(ii) The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the Director, IITM is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:</p> <p>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.</p> <p>b. Failure by the contractor to pay the Director, IITM 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.</p> <p>(iii) 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 Director, IITM.</p> <p>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.</p> <p>(iv) This provisional completion certificate shall be recorded by the concerned Engineer- in- charge with approval of the Director, IIT Madras. After recording of the provisional Completion Certificate for the work by the competent authority, 80 % of performance guarantee shall be returned to the contractor, without any interest.</p> <p>(v) 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.</p>

Recovery of Security Deposit	CLAUSE 1A
	<p>The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Institute at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the tendered value of the work. Such deductions will be made and held by Institute by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Institute Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Institute as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Institute to make good the deficit.</p> <p>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 therefrom, or from any sums which may be due to or may become due to the contractor by Institute on any account whatsoever and in the event of the 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 Institute 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.</p> <p>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.</p> <p>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.</p> <p>Note-1: Institute papers tendered as security will be taken at 5% (five per cent) below its market price or at its face value, whichever is less. The market price of Institute paper would be ascertained by the Divisional Officer at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Institute paper will be withheld if necessary.</p> <p>Note-2: Institute Securities will include all forms of Securities mentioned in Rule No. 274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.</p> <p>Note-3: Note 1 & 2 above shall be applicable for both clause 1 and 1A</p>
Compensation for Delay	CLAUSE 2

	<p>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 Institute on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of 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.</p> <p>This will also apply to items or group of items for which a separate period of completion has been specified.</p> <p>(i) Compensation for delay of work : @ 1 % per month of delay to be computed on per day basis</p> <p>Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10 % of the Tendered Value of work or of the Tendered Value of the Sectional part of work as mentioned in Schedule 'F' for which a separate period of completion is originally given.</p> <p>In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extended period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub clause 5.2, the contractor shall be liable to pay compensation for such delay.</p> <p>Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/services. This is without prejudice to right of action by the Engineer in Charge under clause 3 for delay in performance and claim of compensation under that clause.</p> <p>In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in Schedule F, after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after of determination of contract.</p> <p>The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Institute. In case, the contractor does not achieve a particular milestone mentioned in schedule F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied as above. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.</p>
Incentive for early completion	CLAUSE 2A-DELETED
When Contract can be Determined	CLAUSE 3
	Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims

for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases: 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 unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) If the contractor shall offer or give or agree to give to any person in Institute service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Institute.
- (v) If the contractor shall enter into a contract with Institute 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.
- (vi) If the contractor had secured the contract with Institute as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- (vii) 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.
- (viii) 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.
- (ix) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- (x) 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 Director 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, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Institute.
- (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance 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.

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 3A
	<p>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 more, either party may close the contract by giving notice to the other party stating reasons. In such eventuality, the Performance Guarantee of the contractor shall be refunded within following time limits :</p> <p>(i) If the Tendered value of work is up to Rs. 45 lac : 15 Days</p> <p>(ii) If the Tendered value of work is more than Rs. 45 lac and up to Rs. 2.5 Crore : 30 Days</p> <p>Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the contract by either party. Contractor liable to pay Compensation even if action not taken under Clause 3</p>
Contractor liable to pay compensation even if action not taken under Clause 3	CLAUSE 4
	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) and 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.
Time and Extension for Delay	CLAUSE 5
	<p>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 works 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. However, the handing over of site by the Engineer in Charge, in full or in part (if so provided in contract), shall be completed within two months from issue of acceptance letter. 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 Institute without prejudice to any other right or remedy available in law.</p> <p>5.1 As soon as possible but within twenty one days of award of work and in consideration of</p> <p>(a) Schedule of handing over of site as specified in the Schedule 'F'</p> <p>(b) Schedule of issue of designs as specified in the Schedule 'F'</p> <p>(i) The Contractor shall submit a Time and Progress Chart for each mile stone. The Engineer-in-Charge may within 30 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</p>

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, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.

- (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 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 Rs. 2500/- (for works costing upto Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) 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:-

Force majeure, such as abnormally bad weather, flood, cyclone or any other act of God or serious loss or damage by fire, or civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work or any other cause which, in the absolute discretion 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 endeavors 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.

5.3 In case the work is hindered by any reasons, in the opinion of the contractor, by the Institute or for someone for whose action the Institute is responsible, the contractor may immediately give notice thereof in writing to the Engineer-in-Charge in the same manner as prescribed under sub Clause 5.2 seeking extension of time or rescheduling of milestone/s. 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 after due consideration of the same within 30 days of receipt of such request. In the 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, a fair and reasonable extension within a reasonable period of occurrence of the event.

5.4 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 (Appendix-XVI) or Form of application by the contractor for seeking extension of time (Appendix -XVII) 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. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 30 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.

Computerized Measurement Book	CLAUSE 6
	<p>Engineer – in – charge shall, except as otherwise provided ascertain and determine measurement for the value of work done in accordance with the contract.</p> <p>All measurements of all items having financial value shall be entered by the contractor complied in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the Institute so that a complete record is obtained of all the items of work performed under the contract.</p> <p>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.</p> <p>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 Institute 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.</p> <p>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 Institute. Thereafter, the MB shall be taken in the Divisional Office records, and allotted a number as per the Register of Computerised 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 Institute.</p> <p>The contractor shall also submit to the Institute 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.</p> <p>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.</p> <p>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.</p> <p>The contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement 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 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 checking and/or test 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 or allowance shall be made for such work or the materials with which the same was executed.</p> <p>Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the Institute to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.</p> <p>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</p>

	the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.
Payment on Intermediate Certificate to be Regarded as Advances	CLAUSE 7
Payments in Composite Contracts	<p>No payment shall be made for work, estimated to cost Rs. One 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. One 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 Institute, in triplicate on or before the date of every month, fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than 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 the 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 22nd working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Asstt. Engineer together with the account of the material issued by the Institute, or dismantled materials, if any.</p> <p>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 Institute 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.</p> <p>The Engineer-in-Charge in his sole discretion on the basis of a certificate from the Asstt. Exe. Engineer/Exe. 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 to be submitted by the contractor within 10 days of the interim payment.</p> <p>In case of composite tenders, running payment for the major component shall be made by 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.</p> <p>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 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.</p>
	CLAUSE 7A : DELETED
Completion Certificate and Completion Plans	CLAUSE 8
	<p>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</p>

	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 off 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 sale thereof.
Contractor to Keep Site Clean	CLAUSE 8A
	When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done: without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either Institutionally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.
Completion Plans to be Submitted by the Contractor	CLAUSE 8B
	The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 2005 and (Part-II External) 1994 as applicable within thirty days of the completion of the work. In case the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5 % of the value of the work subject to a ceiling of Rs.50,000/- (Rupees fifty thousand only) as may be fixed by the Superintending Engineer concerned and in this respect the decision of the Superintending Engineer shall be final and binding on the contractor. The contractor shall submit completion plan 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.
Payment of Final Bill	CLAUSE 9
	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 hereunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Asst. Engineer, complete with account of materials issued by the Institute and dismantled materials. (i) If the Tendered value of work is up to Rs. 45 lac : 2 Months (ii) If the Tendered value of work is more than Rs.45 lac and up to Rs. 2.5 Crore : 3 months (iii) If the Tendered value of work exceeds Rs. 2.5 Crore : 6 Months
Payment of Contractor's Bills to Banks	CLAUSE 9A
	Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by Institute or his signature on the bill or other claim preferred against Institute before settlement by the Engineer-in-Charge of the account or claim by

	<p>payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly received and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.</p> <p>Nothing herein contained shall operate to create in favour of the bank; registered financial, co-operative or thrift societies or recognized financial institutions any rights or equities visa-vis the Director, IITM.</p>
Materials supplied by Government	CLAUSE 10 - DELETED
Materials to be provided by the Contractor	CLAUSE 10A
	<p>The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the Institute.</p> <p>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.</p> <p>The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed 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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Secured Advance on Non-Perishable Materials	CLAUSE 10B
	<p>(i) The contractor, on signing an indenture in the form in Annexure XVIII 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 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</p>

<p>Mobilisation Advance</p>	<p>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.</p> <p>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.</p> <p>(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.</p> <p>Before any installment of advance is released, the contractor shall execute Bank Guarantee Bond 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.</p> <p>Provided always that provision of Clause 10 B (ii) shall be applicable only when so provided in ‘Schedule F’.</p>
<p>Plant Machinery & Shuttering Material Advance</p>	<p>(iii) An advance for plant, machinery & shuttering material required for the work and brought to site by the Contractor may be given if requested by the contractor in writing within one month of bringing such plant and machinery to site. Such advance shall be given on such plant and machinery which in the opinion of the Engineer-in-Charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5% percent of the tender value. In the case of new plant and equipment to be purchased for the work, the advance shall be restricted to 90% of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-Charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50% of the depreciated value of plant and equipment as may be decided by the Engineer-in-Charge. The contractor shall, if so required by the Engineer-in-Charge, submit the statement of value of such old plant and equipment duly approved by a Registered Valuer recognized by the Central Board of Direct Taxes under the Income- Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on any plant and equipment of a value less than Rs. 50,000/- Seventy five per cent of such amount of advance shall be paid after the plant & equipment is brought to site and balance twenty five percent on successfully commissioning the same.</p> <p>Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following:</p> <ol style="list-style-type: none"> 1. Leasing company, which gives certificate of agreeing to lease equipment to the contractor. 2. Engineer in Charge, and 3. The contractor.
<p>Interest & Recovery</p>	<p>(IV) This advance shall further be subject to the condition that such plant and equipment (a) are considered by the Engineer-in-Charge to be necessary for the works; (b) and are in working order and are maintained in working order; (c) hypothecated to the Institute as specified by the Engineer- in-Charge before the payment of advance is released. The contractor shall not be permitted to remove from the site such hypothecated plant and equipment without the prior written permission of the Engineer-in-Charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. For this purpose, steel scaffolding and form work shall be treated as plant and equipment. The contractor shall insure the Plant and Machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insurer will be borne by the contractor.</p> <p>(i) The mobilization advance and plant and machinery advance in (ii) & (iii) above bear simple interest at the rate of 10 per cent per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount</p>

	<p>of advance. Recovery of such sums advanced shall be made by the deduction from the contractors bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty per cent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment.</p> <p>(ii) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the Engineer-in-Charge.</p>
<p>Payment on Account of Increase in Prices/Wages due to Statutory Order(s)</p>	<p>CLAUSE 10 C</p>
	<p>If after submission of the tender, if the price of any material incorporated in the work (excluding the material covered under clause 10 CA and not been a material supply for a Engineerin charge’s store in accordance with clause 10 therefore)and/ or wages of labour increase as a direct result of the coming into force of any fresh ,law or statutory rule or order (butnot due to any variation of rate in GST applicable on such material(s) being considered under this clause) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, then the amount of the contract shall accordingly be varied.</p> <p>If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and not being a material supplied from the Engineer-in-Charge’s stores in accordance with Clause 10 thereof) and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty), Institute shall in respect of materials incorporated in the works (excluding the materials covered under Clause 10CA and not being materialsupplied from the Engineer-in-Charge’s stores in accordance with Clause 10 hereof) and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor,such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2.</p> <p>Engineer-in-Charge shall call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages. The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer- in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.</p>

	<p>For this purpose, the labour component of 85% of the value of the work executed during period under consideration shall not exceed the percentage as specified in Schedule F, of the value of work done during that period and the increase/decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled mazdoor, fixed under any law, statutory rule or order. The cost of work for which escalation is applicable (W) is same as cost of work done worked out as indicated in sub-para (ii) of clause 10 CC except the amount of full assessed value of secured Advance.</p>
<p>Payment due to variation in prices of materials after receipt of tender</p>	<p>CLAUSE 10 CA</p>
	<p>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.</p> <p>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).</p> <p>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 (works), 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 Institute 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 (Works), 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.</p> <p>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:-</p> <p>a) Adjustment for component of 'Grey Cement'</p> $V = \frac{P \times Q \times (CI - CI_0)}{CI_0}$ <p>Where,</p>

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

P = Base Price of materials as issued under authority of CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER, CPWD valid at the time of the last stipulated date of receipt of tender including extensions, if any.

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

CI₀ = Price index for cement (Grey Cement) as issued by the CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER CPWD as valid on the last stipulated date of receipt of tenders including extensions, if any.

CI = Price index for cement (Grey cement) as issued under the authority of CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER CPWD for period under consideration.

(In respect of the justified period extended under the provisions of clause 5 of the contract with out any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration whichever is less shall be considered)

b) Adjustment for component of 'Steel, Long'

$$V_s = \frac{P_s \times Q_s \times (SI - SI_0)}{SI_0}$$

Where,

V_s = Variation in cost of steel reinforcement bars i.e. increase or decrease in the amount in rupees to be paid or recovered.

P_s = Base Price of steel reinforcement bars, as issued under authority of CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER CPWD at the time of the last stipulated date of receipt of tender including extensions, if any.

Q_s = Quantity of steel paid either by way of secured advance or used in the works since previous bill. (Whichever is earlier)

SI₀ = Price index for steel reinforcement bars (Steel, Long) as issued by the CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER CPWD as valid on the last stipulated date of receipt of tenders including extensions, if any.

SI = Price index for steel reinforcement bars (Steel, Long) as issued under the authority of CPWD SOUTHERN REGION CI PUBLISHED BY CHIEF ENGINEER CPWD for period under consideration.

Note: (i) In respect of the justified period extended under the provisions of clause 5 of the contract with out any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration whichever is less shall be considered).

Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of Materials covered in this Clause.

	<p>(iii) 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.</p> <p>(iv) Cement mentioned wherever in this clause includes Cement component used in RMC brought at site from outside approved RMC plants, if any.</p> <p>(v) 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.</p> <p>(vi) 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</p>
<p>Payment due to Increase/Decrease in Prices/Wages (excluding materials covered under clause 10 CA) after Receipt of Tender for Works</p>	<p>CLAUSE 10 CC</p>
	<p>If the prices of materials (not being materials supplied or services rendered at fixed prices by the Institute 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 that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less 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:-</p> <p>base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any.</p> <p>The cost of work on which escalation will be payable shall be reckoned as below :</p> <p>(a) Gross value of work done up to this quarter : (A)</p> <p>(b) Gross value of work done up to the last quarter : (B)</p> <p>(c) Gross value of work done since previous quarter (A-B): (C)</p> <p>(d) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) fresh paid in this quarter : (D)</p> <p>(e) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) recovered in this quarter : (E)</p> <p>(f) Full assessed value of Secured Advance for which escalation Payable in this quarter (D-E): (F)</p> <p>(g) Advance payment made during this quarter: (G)</p> <p>(h) Advance payment recovered during this quarter: (H)</p>

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

$N = 0.85 M$

(k) Less cost of material supplied by the Institute as per

Clause 10 and recovered during the quarter (K)

(l) Less cost of services rendered at fixed charges as per Clause

34 and recovered during the quarter (L)

Cost of work for which escalation is applicable:

$W = N - (K + L)$

(iii) Components for materials (except cement, reinforcement bars, structural steel or other materials covered under clause 10 CA) labour, P.O.L., etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule '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 or other materials covered under clause 10 CA) and P.O.L. shall be worked as per the formula given below:-

Adjustment for civil component (except cement, structural steel, reinforcement bars and other materials covered under clause 10CA) / electrical component of construction 'Materials'

$$V_m = W \times \frac{X_m}{100} \times \frac{MI - M_{Io}}{M_{Io}}$$

V_m = 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.

X_m = Component of 'materials' (except cement, structural steel, reinforcement bars 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 stipulated date of completion or the prevailing index of the period under consideration, whichever is less, shall be considered.)

M_{Io} = 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 Institute in case of computerised 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 MI and FI 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:-

$$VL = W \times \frac{Y}{100} \times \frac{LI - Llo}{Llo}$$

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

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

Y : Component of labour expressed as 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 stipulated date of Completion or the minimum wage prevailing on the last date of the quarter previous to the one under consideration, whichever is less, shall be considered.)

Llo : 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.

(vii) The following principles will be followed while working out the compensation as per sub-para (vi) above.

(a) The minimum wage of an unskilled male mazdoor mentioned in sub-para (vi) above shall be the higher of the wage notified by Government of India, Ministry of Labour

	<p>and that notified by the local administration both relevant to the place of work and the period of reckoning.</p> <p>(b) The escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials and/or P.O.L. is paid under this clause. If such revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rates only for work done in subsequent quarters;</p> <p>(c) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled adult male mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.</p> <p>(viii) 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:</p> <p>(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'.</p> <p>(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.</p> <p>(ix) Provided always that:-</p> <p>(a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable but provisions of clause 10CA will be applicable.</p> <p>(b) Where provisions of clause 10CC are not applicable, provisions of clause 10C and 10CA will become applicable.</p>
<p>Dismantled Material Govt. Property</p>	<p>CLAUSE 10 D</p>
	<p>The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Institute's property and such materials shall be disposed off to the best advantage of Institute according to the instructions in writing issued by the Engineer-in-charge.</p>
<p>Work to be Executed in Accordance with Specifications, Drawings, Orders etc</p>	<p>CLAUSE 11</p>
	<p>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</p>

	<p>specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Institute 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.</p> <p>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.</p>
<p>Deviations/ Variations Extent and Pricing</p>	<p>CLAUSE 12</p>
<p>Deviation, Extra Items and Pricing</p>	<p>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.</p> <p>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 :</p> <p>(i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.</p> <p>(ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.</p> <p>12.2</p> <p>A. For Project and original works:</p> <p>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) 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.</p>

<p>Deviation, Substituted Items, Pricing</p>	<p>B. For Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration:</p> <p>In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above/ below quoted contract amount.</p> <p>Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.</p> <p>A. For Project and original works:</p> <p>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.</p> <p>(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).</p> <p>(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).</p> <p>B. For Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration:</p> <p>In the case of substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above/ below quoted contract amount. Payment of substitute items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.</p> <p>A. For Project and original works:</p> <p>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 and the contractor shall be paid in accordance with the rates so determined.</p> <p>B. For Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration:</p> <p>In the case of contract items, which exceed the limits laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.</p> <p>The prescribed time limits for finalising rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items is within 30 days after submission of proposal by the contractor without observation of the Engineer-in-Charge.</p>
<p>Deviation, Deviated Quantities, Pricing</p>	<p>12.3 A For Projects and original works:</p>

<p>Foreclosure of contract due to Abandonment or Reduction in Scope of Work</p>	<p>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.</p> <p>B. For Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration: 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.</p> <p>12.4 The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Superintending Engineer may authorise reconsideration of such claims on merits.</p> <p>12.5 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:</p> <p>(i) For Buildings : All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.</p> <p>(ii) For abutments, piers and well staining : All works up to 1.2 m above the bed level.</p> <p>(iii) For retaining walls, wing walls, compound walls, chimneys, over head reservoirs/ tanks and other elevated structures : All works up to 1.2 metres above the ground level.</p> <p>(iv) For reservoirs/tanks (other than overhead reservoirs/tanks) : All works up to 1.2 metres above the ground level.</p> <p>(v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.</p> <p>(vi) For Roads, all items of excavation and filling including treatment of sub base.</p> <p>12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while filing 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.</p> <p>Nothing extra shall be admissible for such operations.</p>
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CLAUSE 13

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 full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be 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) Institute shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however Institute shall be 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 Institute, 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) If any materials supplied by Institute are rendered surplus, the same except normal wastage shall be returned by the contractor to Institute at rates not exceeding those at which these were originally issued, less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to Institute stores, if so required by Institute, shall be paid.

(iv) 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.

(v) 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), (iv) and (v) 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 Institute 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 Institute from the contractor under the terms of the contract.

	<p>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 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.</p>
<p>Carrying out part work at risk & cost of contractor</p>	<p>CLAUSE 14</p>
	<p>If Contractor;</p> <p>(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 days in this respect from the Engineer-in-Charge; or</p> <p>(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 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or</p> <p>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.</p> <p>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 Institute, 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:</p> <p>(a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or</p> <p>(b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.</p> <p>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 Institute because of action under this clause shall not exceed 10% of the tendered value of the work.</p> <p>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 Institute are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the</p>

	<p>contractor.</p> <p>Any excess expenditure incurred or to be incurred by Institute in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Institute as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Institute 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.</p> <p>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.</p> <p>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.</p>
<p>Suspension of Work</p>	<p>CLAUSE 15</p>
	<p>(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:</p> <ul style="list-style-type: none"> (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. <p>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.</p> <p>If the suspension is ordered for reasons (b) and (c) in sub-Para (i) above;</p> <p>(ii) 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.</p> <ul style="list-style-type: none"> (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. <p>(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 Institute or where it affects whole of the works, as an abandonment of the works by Institute, 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</p>

	<p>abandonment of the contract by Govern-ment, 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.</p>
Compensation in case of Delay of Supply of Material by Govt.	CLAUSE 15A
	The contractor shall not be entitled to claim any compensation from Institute for the loss suffered by him on account of delay by Institute in the supply of materials in schedule 'B' where such delay is covered by the difficulties relating to the supply of wagons, force majeure or any reasonable cause beyond the control of the Institute. This clause 15 A will not be applicable for works where no material is stipulated.
Action in case Work not done as per Specifications	CLAUSE 16
	<p>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 Institute or any organization engaged by the Institute 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.</p> <p>If it shall appear to the Engineer-in-Charge or his authorized subordinates incharge 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 Institute for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within 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.</p> <p>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.</p>
Contractor Liable for Damages, defects during defect liability period	CLAUSE 17
	<p>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</p>

	<p>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 lacs 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.</p> <p>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.</p>
Contractor to Supply Tools & Plants etc.	CLAUSE 18
	<p>The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants as specified in schedule F. 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.</p>
Recovery of Compensation paid to Workmen	CLAUSE 18A
	<p>In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, Institute is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Institute will recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the Institute under sub-section (2) of Section 12, of the said Act, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise. Institute shall not be bound to contest any claim made against it under sub-section (1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to Institute full security for all costs for which Institute might become liable in consequence of contesting such claim.</p>
Ensuring Payment and Amenities to Workers if Contractor fails	CLAUSE 18B

	<p>In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Institute is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Institute from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, Institute will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Institute under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise Institute shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Institute full security for all costs for which Institute might become liable in contesting such claim.</p>
Labour Laws to be complied by the Contractor	CLAUSE 19
	<p>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.</p> <p>The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.</p> <p>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.</p> <p>Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.</p>
	CLAUSE 19A
	No labour below the age of fourteen years shall be employed on the work.
Payment of Wages	CLAUSE 19B
	<p>Payment of wages: The contractor shall pay to labour employed by him either directly or through sub-contractors, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations 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.</p>

(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 cause to be complied with the Central Public Works Institute contractor's Labour Regulations made by Institute from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature 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-fulfilment 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. In the case of Union Territory of Delhi, however, as the all inclusive minimum daily wages fixed under Notification of the Delhi Administration No.F.12(162)MWO/DAB/ 43884-91, dated 31-12-1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise.

(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 thereunder from time to time.

(vi) The contractor shall indemnify and keep indemnified Institute against payments to be made under and for the observance of the laws aforesaid and the C.P.W.D. Contractor's 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 workman 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. 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 C.P.W.D. 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 of Rs.2000/- 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
	<p>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:-</p> <ol style="list-style-type: none"> (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 fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and (5) the number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them. <p>Failing which the contractor shall be liable to pay to Institute, a sum not exceeding Rs.2000/- for each default or materially incorrect statement. The decision of the Divisional Officer shall be final in deducting from any bill due to the contractor, the amount levied as fine and be binding on the contractor.</p>
	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 Institute from time to time for the protection of health and sanitary arrangements for workers employed by the Central Public Works Institute and its contractors.
	CLAUSE 19F
	<p>Leave and pay during leave shall be regulated as follows:-</p> <ol style="list-style-type: none"> 1. Leave : <ol style="list-style-type: none"> (i) in the case of delivery - maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day, (ii) in the case of miscarriage - upto 3 weeks from the date of miscarriage. 2. Pay : <ol style="list-style-type: none"> (i) in the case of delivery - leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater.

	<p>(ii) in the case of miscarriage - leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage.</p> <p>3. Conditions for the grant of Maternity Leave:</p> <p>No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave.</p> <p>4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in appendix -I and II, and the same shall be kept at the place of work.</p>
	<p>CLAUSE 19G</p>
	<p>In the event of the contractor(s) committing a default or breach of any of the provisions of the Central Public Works Institute, 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 Institute a sum not exceeding Rs.200/- 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 Rs.200/- per day for each day of default subject to a maximum of 5 per cent 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.</p> <p>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 work-people 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 work-people 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 to 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).</p>
	<p>CLAUSE 19H - Deleted</p>

	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. AE/JE will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service centre, to apprise the residents about the same.
	CLAUSE 19J
	It shall be the responsibility of the contractor to see that the building under construction is not occupied by any body unauthorizedly 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 Superintending Engineer, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.
Employment of skilled/semi skilled workers	CLAUSE 19K
	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 Institute. 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 of Rs. 100 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.
Contribution of EPF and ESI	CLAUSE 19L

	The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-Charge to the contractor on actual basis.
Minimum Wages Act to be Complied with	CLAUSE 20
	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 thereunder and other labour laws affecting contract labour that may be brought into force from time to time.
Work not to be sublet. Action in case of insolvency	CLAUSE 21
	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 Institute in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Director, IITM shall have power to adopt the course specified in Clause 3 hereof in the interest of Institute 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 Institute without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.
Changes in firm's Constitution to be intimated	CLAUSE 23
	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.
Life Cycle Cost	CLAUSE 24
	All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
Settlement of Disputes & Arbitration	CLAUSE 25
	Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, designs, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders of these conditions or otherwise concerning the works or the execution or failure to executes the same whether arising during the progress of work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned herein after.

	<p>(i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-charge or any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Professor In-charge, NTCPWC, IITM in writing for written instruction or decision. Thereupon, the Professor In-charge, NTCPWC, IITM shall give his written instructions or decisions within a period of one month from the receipt of the contractor's letter.</p> <p>(ii) If the Professor In-charge, NTCPWC, IITM fails to give his instructions or decisions in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Professor In-charge, NTCPWC, IITM, the contractor may, within 15 days of the receipt of Professor In-charge, NTCPWC, IITM decision appeal to the Chairman (Engineering Unit), IITM who shall afford an opportunity to the contractor to be heard, if the matter so desires and to offer evidence in support of his appeal. The Chairman (Engineering Unit), IITM shall give his decision within 30 days of receipt of contractor's appeal.</p> <p>(iii) If the contractor is dissatisfied with the decision of the Chairman (EU) of IITM, he shall within 30 days of the receipt of the decision shall give notice to refer the dispute to the Dispute Redressal Committee (DRC) along with a list of disputes with amounts claimed in respect of each such dispute and giving reference to the rejection of his disputes by the Chairman (EU). The Dispute Redressal Committee (DRC) shall give its decision within a period of 30 days from the receipt of Contractor's appeal. The constitution of Dispute Redressal Committee (DRC) shall be as indicated in Schedule 'F'. If the Dispute Redressal Committee (DRC) fails to give its decision within the aforesaid period or the contractor is dissatisfied with the decision of Dispute Redressal Committee (DRC), then the contractor may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC), can appeal to the Director. The Director shall give his decision within 30 days of appeal. If the contractor is not satisfied with the decision of the Director, he may request Director for appointment of arbitrator on prescribed proforma as per Appendix XV, failing which the said decision shall be final and binding on the contractor.</p> <p>(iv) Except where the decision has become final, binding and conclusive in terms of Sub para (iv) above, disputes or differences shall be referred for adjudication through a sole arbitrator appointed by the Director, IITM. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall proceed with the reference from the stage at which it was left by his predecessor.</p> <p>(v) It is a term of this contract that the party invoking arbitration shall give list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Director, IITM of the appeal. It is also a term of this contract that no person other than a person appointed by such Director, IITM, as aforesaid should act as arbitrator.</p> <p>(vi) It is also a term of this Contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and IITM shall be discharged and released of all liabilities under the Contract in respect of these claims.</p> <p>(vii) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.</p> <p>(viii) It is also term of this Contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the Director, IITM and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.</p> <p>(ix) It is also a term of the Contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.</p> <p>(x) It is also a term of the Contract that the arbitrator shall be deemed to have entered on the reference on the date of issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and</p>
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published, be paid half and half by each of the parties. The cost of the reference and

	of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid
Contractor to Indemnify Govt. against Patent Rights	CLAUSE 26
	The contractor shall fully indemnify and keep indemnified the Director, IITM against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against Institute in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the Director, IITM if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.
	CLAUSE 27 - Deleted
Action where no Specifications are specified	CLAUSE 28
	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 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.
Withholding and lien in respect of sum due from contractor	CLAUSE 29
	<p>(i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the Institute shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Institute shall be entitled to withhold the security deposit,</p> <p>if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the Institute shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Institute or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.</p> <p>It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or Institute will be kept withheld or retained as such by the Engineer-in-Charge or Institute till the claim arising out of or under the contract is determined by the arbitrator(if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the Institute shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.</p> <p>(ii) Institute shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Institute to recover the same from him in the manner prescribed in sub-</p>

	<p>clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Institute to the contractor, without any interest thereon whatsoever.</p> <p>Provided that the Institute shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Superintending Engineer or Executive Engineer on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Superintending Engineer or the Executive Engineer.</p>
Lien in respect of claims in otherContracts	CLAUSE 29A
	<p>Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Institute or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Institute or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer- in-Charge or the Institute or with such other person or persons.</p> <p>It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Institute will be kept withheld or retained as such by the Engineer-in-Charge or the Institute or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.</p>
Water for Works	CLAUSE 30
	<p>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.</p> <ul style="list-style-type: none"> 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. iii) No bore wells / open wells shall be constructed inside the IITM Campus for drawl of water
Hire of Plant & Machinery	CLAUSE 31
	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.

Employment of Technical Staff and employees	CLAUSE 32
	<p>Contractors Superintendence, Supervision, Technical Staff & Employees</p> <p>(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.</p> <p>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'. 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-in-Charge and shall be available at site before start of work.</p> <p>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.</p> <p>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</p>

	<p>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.</p> <p>(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.</p> <p>The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.</p> <p>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.</p>
<p>Levy/Taxes payable by Contractor</p>	<p>CLAUSE 33</p>
	<p>(i) All taxes, duties and levis including GST at applicable rate at time of time and Tamil Nadu Manual workers general Welfare Fund or any other tax or cess in respect of this contract shall be payable by the Contractor and IITM shall not entertain any claim whatsoever in this respect.</p> <p>(ii) Section 171 of the central goods and service tax 2017 (anti profiteering measure) will be applicable for this tender which states that “ Any reduction in rate of tax on any supply of goods or services of the benefit of input tax credit shall be passed on to the recipient by way of commensurate reduction in prices”. Suitable undertaking to be given by the contractor.</p> <p>(iii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.</p> <p>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.</p>
<p>Conditions for reimbursement of levy / taxes if levied after receipt of tenders</p>	<p>CLAUSE 34</p>
	<p>i) If any further tax of cess is imposed by Statute after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes / levies / cess, the contractor shall be reimbursed the amount so paid. provided such payments, if any, is not, in the opinion of the Engineer-in-charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.</p> <p>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 Institute and/or the Engineer-in-Charge and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.</p>

	<p>iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or excess, , 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.</p>
Termination of Contract on death of contractor	CLAUSE 35
	Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Divisional Officer on behalf of the Director, IITM shall have the option of terminating the contract without compensation to the contractor.
If relative working in CPWD then the contractor not allowed to tender	CLAUSE 36
	<p>The contractor shall not be permitted to tender for works in the CPWD circle (Division in case of contractors of Horticulture/Nursery categories) responsible for award and execution of contracts in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the C.P.W.D. or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute. If however, the contractor is registered in any other Institute, he shall be debarred from tendering in IITM for any breach of this condition.</p> <p>NOTE: By the term “near relatives” is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.</p>
No Gazetted Engineer to work as Contractor within one year of retirement of Government	CLAUSE 37
	No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in an engineering Institute of the Institute of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from Institute service without the previous permission of Institute 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 Institute of India as aforesaid, before submission of the tender or engagement in the contractor’s service, as the case may be.
Theoretical consumption of Material	CLAUSE 38
	<p>(i) After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance - (see Clause 10), theoretical quantity of materials issued by the Institute for use in the work shall be calculated on the basis and method given hereunder:-</p> <p>(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.</p> <p>(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 issues each diameter wise, section wise and category wise separately.</p> <p>(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.</p> <p>(d) For any other material as per actual requirements.</p>

	<p>(ii) Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorized variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer-in-Charge within fifteen days of the issue of written notice by the Engineer-in-Charge to this effect, shall be recovered at the rates specified in Schedule 'F', without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer-in-Charge in regard to theoretical quantities of materials, which should have been actually used as per the Annexure of the standard schedule of rates and recovery at rates specified in Schedule 'F', shall be final & binding on the contractor.</p> <p>For non scheduled items, the decision of the Superintending Engineer regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor.</p> <p>(iii) The said action under this clause is without prejudice to the right of the Institute to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.</p>
Compensation during warlike situations	CLAUSE 39
	<p>The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed, but not already measured and paid for, the compensation shall be assessed by the Divisional Officer upto Rs.5,000/- and by the Superintending Engineer concerned for a higher amount. The contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.</p> <p>Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work. In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Divisional Officer.</p>
Apprentices Act provisions to be complied with	CLAUSE 40
	<p>The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Superintending Engineer may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.</p>
Release of Security deposit after labour clearance	CLAUSE 41
	<p>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.</p>