TENDER NO: WAP/CMU-III/2024-25/ AU/Silchar/07



WAPCOS LIMITED

**(भारत सरकार का उपक्रम)** ज**ल शक्ति मंत्रालय** (A Government of India Undertaking) Ministry of Jal Shakti

### **TENDER NOTICE FOR**

### REPAIR AND MAINTENANCE WORKS OF VARIOUS BUILDINGS AT ASSAM UNIVERSITY

### NIT No. WAP/CMU-III/2024-25/ AU/Silchar/07

Date: 05-07-2024

### WAPCOS LIMITED 1st floor, Plot no. 148, Sector- 44, Gurugram, Haryana-122003

July, 2024

#### TABLE OF CONTENT

NOTICE INVITING TENDER (NIT)					
SECTION: I	INSTRUCTIONS TO BIDDER				
SECTION: II	SELECTION AND QUALIFYING CRITERIA				
SECTION: III	FORMS				
	Letter of Transmittal for Technical Bid and Financial bid along with				
	Declaration by the bidder				
FORM - A	Financial Information				
FORM - B	Solvency Certificate				
FORM - C	Correspondence Details of Issuing Authority				
FORM - D	Bid Capacity				
FORM - E	Structure & Organization				
FORM - F	Undertaking for Manpower Deployment				
FORM - G	No Conviction Certificate				
FORM - H	No Deviation Certificate				
FORM - I	Undertaking regarding Blacklisting / Non Debarment				
FORM - J	Undertaking for Restriction under Rule 144(XI) of GFRs				
FORM - K	Preference to Make In India				
FORM - L	Understanding the Project Site				
SECTION: IV	GENERAL CONDITIONS OF CONTRACT				
SECTION: V	SPECIAL CONDITIONS OF CONTRACT				
SECTION: VI	ANNEXURES				
ANNEXURE - I	Format for Contract Agreement and Letter of Award				
ANNEXURE - II	Format for Performance Bank Guarantee				
	Format for Mobilization Advance Payment Bank Guarantee				
ANNEXURE - III					
ANNEXURE - IV	Format for Indenture for Secured Advances				
ANNEXURE - IV ANNEXURE - V	Format of Bank Guarantee for EMD				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI	Format of Bank Guarantee for EMD Format for Seeking Extension of Time				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII	Format of Bank Guarantee for EMD Format for Seeking Extension of Time Format of Guarantee Bond /Affidavit for Works				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of Water				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of Water Proofing Works				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of WaterProofing WorksFormat for Guarantee Bonds for Anti-Termite Treatment				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of Water Proofing WorksFormat for Guarantee Bonds for Anti-Termite TreatmentSafety Codes				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX	Format of Bank Guarantee for EMD         Format for Seeking Extension of Time         Format of Guarantee Bond /Affidavit for Works         Contract For Removal of Defects after Completion in Respect of Water         Proofing Works         Format for Guarantee Bonds for Anti-Termite Treatment         Safety Codes         Model Rules for The Protection of Health and Sanitary Arrangements for				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of Water Proofing WorksFormat for Guarantee Bonds for Anti-Termite TreatmentSafety CodesModel Rules for The Protection of Health and Sanitary Arrangements for Workers Employed by Contractors				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of WaterProofing WorksFormat for Guarantee Bonds for Anti-Termite TreatmentSafety CodesModel Rules for The Protection of Health and Sanitary Arrangements forWorkers Employed by ContractorsContractor's Labour Regulations				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of Water Proofing WorksFormat for Guarantee Bonds for Anti-Termite TreatmentSafety CodesModel Rules for The Protection of Health and Sanitary Arrangements for Workers Employed by Contractors				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI	Format of Bank Guarantee for EMDFormat for Seeking Extension of TimeFormat of Guarantee Bond /Affidavit for WorksContract For Removal of Defects after Completion in Respect of WaterProofing WorksFormat for Guarantee Bonds for Anti-Termite TreatmentSafety CodesModel Rules for The Protection of Health and Sanitary Arrangements forWorkers Employed by ContractorsContractor's Labour Regulations				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI ANNEXURE - XII ANNEXURE - XII	Format of Bank Guarantee for EMD         Format for Seeking Extension of Time         Format of Guarantee Bond /Affidavit for Works         Contract For Removal of Defects after Completion in Respect of Water         Proofing Works         Format for Guarantee Bonds for Anti-Termite Treatment         Safety Codes         Model Rules for The Protection of Health and Sanitary Arrangements for         Workers Employed by Contractors         Contractor's Labour Regulations         No Claim Certificate				
ANNEXURE - IV ANNEXURE - V ANNEXURE - VI ANNEXURE - VII ANNEXURE - VIII ANNEXURE - IX ANNEXURE - X ANNEXURE - XI ANNEXURE - XII ANNEXURE - XII SECTION VII	Format of Bank Guarantee for EMD         Format for Seeking Extension of Time         Format of Guarantee Bond /Affidavit for Works         Contract For Removal of Defects after Completion in Respect of Water         Proofing Works         Format for Guarantee Bonds for Anti-Termite Treatment         Safety Codes         Model Rules for The Protection of Health and Sanitary Arrangements for         Workers Employed by Contractors         Contractor's Labour Regulations         No Claim Certificate				

## NOTICE INVITING TENDER (NIT)

#### SHORT NOTICE INVITING TENDER (NIT)

#### NIT No. WAP/CMU-III/2024-25/AU/Silchar/07

#### Dated 05-07-2024

WAPCOS Limited (A Govt. of India Undertaking) as a Project Management Consultant on behalf of Assam University, invites open online Percentage Rate e-tender from Experienced, Competent and Eligible Contractors in a two-envelope system for the below mentioned work:

1.	Work/ Project	Repair and Maintenance Works of Various Buildings at Assam University	
2.	Site / Location	Assam University, Silchar, Assam - 788011	
3.	Website for viewing tender, Corrigendum/ Addendum, if any.	www.wapcos.co.in & www.etenders.gov.in/eprocure	
4.	Website for Registration/ uploading of Tender	www.etenders.gov.in/eprocure	
5.	Estimated / NIT Cost	Rs. 3,53,63,989/- excluding GST	
6.	Cost of Tender Document	Rs. 10,000/- (Rupees Ten thousand Only) as Tender Processing Fee in the form of Demand Draft	
7.	Earnest Money Deposit (EMD) / Bid Security	Rs. 7,07,280/- (Refundable) in the form of Insurance Surety Bonds/ Account Payee Demand Draft/ Fixed Deposit Receipt/ Banker's Cheque or Payment through RTGS/ NEFT in favor of 'WAPCOS Limited' payable at Gurugram, Haryana. The bank account as per details for EMD Fee: Name of Bank: Indian Overseas Bank Bank Account Number: 193502000000405 IFSC Code: IOBA0001935 Branch Name: National Horticulture Board (NHB) Building, G-85, Industrial Area, Sector-18, Gurugram-122015, Haryana <b>Note: Bid Security shall remain valid for a period of 45 days beyond final bid validity period</b> .	
8.	Solvency Certificate - specific to this Bid submission only and mentioning the name of the work/project	Rs. 1,41,45,596/- in original from a Nationalized/ Scheduled Commercial Bank approved by Reserve Bank of India (RBI). The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana quoting the name of the work. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate.	
		<b>Note:</b> This Certificates will be verified from the issuing authority by WAPCOS.	

9.	Project Completion Period	As per Completion Time Period in Section - VIII		
10.	Bid Validity Period	90 days from the date of opening of Technical bid		
11.	Site Visit	The bidders are advised/encouraged to visit the site		
		for actual assessment of the project site location		
		and its consequences during execution of work		
12.	Pre Bid Meeting	11-07-2024 at 3:00 PM to be held in the office of		
		Chief Engineer, Construction Management Unit-III		
13.	Last date & time for online	19-07-2024 up to 15:00 hours		
	submission of Technical &			
	Financial Bid			
14.	Offline Submission of Technical	19-07-2024 up to 17:00 hours in the office of Chief		
	document, Tender Fees, EMD etc.	Engineer, Construction Management Unit-III at 1 <sup>st</sup>		
	as detail in Tender for bidders.	Floor, NPCC Building, Plot No. 148, Sector- 44		
		Gurugram- 122003, Haryana		
15.	Online opening of Technical Bid	20-07-2024 up to 17:00 hours		
16.	Online opening of Financial Bid	Will be intimated to Technical Qualified bidders.		
17.	Tender Inviting Authority &	Chief Engineer		
	Communication address during	Construction Management Unit-III		
	Tendering and Execution of Works	1st floor, Plot no. 148,		
		Sector- 44, Gurugram, Haryana-122003		
		Email: projects@wapcos.co.in		
		Contact No. +91-124-4488018		
18.	The Bid Security/ EMD / Solvency	WAPCOS Limited		
	Certificate / BG against	76-C, Institution Area		
	Performance Security/ BG against	Sector-18, Gurugram, Haryana-122015		
	Mobilization Advance/ shall be			
	addressed to WAPCOS Corporate			
	Office			

- The tender document has to be viewed/ downloaded from above specified websites. Bidders are advised to visit above specified websites regularly for updates /Amendments/ Corrigendum, if any and not be published elsewhere. The Updates/Corrigendum/Addendum shall be followed up to submission of tender and it will be the part of tender.
- The purpose of this NIT is to provide interested parties with information to assist the preparation of their bid. While WAPCOS Limited has taken due care in the preparation of the information contained herein, and believe it to be complete and accurate, neither it nor any of its authorities or agencies nor any of its respective officers, employees, agents or advisors give any warranty or make any representations, expressed or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it. The bidders must read all the terms and conditions of bidding document carefully and only submit the bid, if eligible and in possession of all the documents required. Corrigendum while all efforts have been made to avoid errors in the drafting of the tender documents, the bidder is advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained.
- Further, WAPCOS Limited does not claim that the information is exhaustive. Respondents to this NIT are required to make their own inquiries/ surveys and will be required to confirm, in writing, that they have done so and they did not rely solely on the information in NIT. WAPCOS Limited is not responsible if no due diligence is performed by the bidders.

- If the office of WAPCOS Limited happens to be closed on the last date and time mentioned for any of the event, the said event will take place on the next working day at the same time and venue.
- WAPCOS Ltd. reserves the right to accept or reject any or all bids without assigning any reasons. No bidder shall have any cause of action or claim against the WAPCOS Ltd. For rejection of his Bid and will not be bound to accept the lowest or any other tender.
- No reimbursement of cost of any type or on any account will be paid to persons or entities submitting their Bid.
- All information submitted in response to this NIT shall be the property of WAPCOS Limited and it shall be free to use the concept of the same at its will.
- It is hereby declared that WAPCOS is committed to follow the principle of transparency, equity
  and competitiveness in public procurement. The subject Notice Inviting Tender (NIT) is an
  invitation to offer made on the condition that the bidder will sign the integrity Agreement, which
  is an integral part of tender/bid documents, failing which the tenderer/bidder will stand
  disqualified from the tendering process and the bid of the bidder would be summarily rejected.
  This declaration shall form part and parcel of the Integrity Agreement and signing of the same
  shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the
  WAPCOS.

#### For and on behalf of WAPCOS LIMITED

-sd-Chief Engineer Construction Management Unit-III

# **SECTION-I**

## **INSTRUCTIONS TO BIDDER**

#### SECTION-I INSTRUCTIONS TO BIDDER

#### 1.0 SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING

#### 1.1 GENERAL

Submission of Online Bids is mandatory for this Tender. E-Tendering is a methodology for conducting Public Procurement in a transparent and secured manner. For conducting electronic tendering, bidders shall use the portal <u>www.etenders.gov.in/eprocure</u>. Tender is invited in Single Stage -Two Envelope system, one Technical Bid and second as financial bid. Accordingly, bidder is directed to make all formalities and registration on <u>www.etenders.gov.in/eprocure</u> website and submit the Technical Bid and Financial bid.

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid <u>Digital Signature Certificates</u>. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained from website: <u>https://etenders.gov.in/eprocure/app</u>.

#### 1.2 **REGISTRATION**

- a) The bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <u>https://etenders.gov.in/eprocure/app</u>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- c) The 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.
- d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- f) The bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.

#### **1.3 SEARCHING FOR TENDER DOCUMENTS**

- a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- b) 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 Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.

c) 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.

#### 1.4 PREPARATION OF BIDS

- a) The bidder should take into account any corrigendum, Addendum published on the web portal along with tender document before submitting their bids.
- b) The bidder should read the tender document, corrigendum, Addendum and any other related correspondence, carefully to understand the documents required to be submitted as part of the bid.
- c) The bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

#### 1.5 SUBMISSION OF BIDS

- a) Please uninstall any Java version if installed already. Then go to this link <u>https://eprocure.gov.in/cppp/jre-windows-i586.exe</u> and download this prescribed version of java for this portal.
- b) The bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. The bidder will be responsible for any delay due to other issues.
- c) The bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. The bidder will be responsible for any delay due to other issues.
- d) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- e) The bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- f) The bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- g) The bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by the bidders. The bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- h) 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.

- i) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- j) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- k) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), 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.
- The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### 2.0 INSTRUCTIONS TO BIDDER

The purpose of these instructions to serve as a guide to bidders for preparing offer for carrying out the project in all respect.

- a) Submission of a tender by a tenderer implies that the bidder has read Each Section of Tender Document, Corrigendum, Addendum and other related correspondence and has made himself aware about the complete scope of work under the tender document. Accordingly, Contract shall be governed by each Section of Tender Document and all other Conditions mentioned in the tender documents.
- b) WAPCOS Limited desires that the bidders, suppliers, and sub-contractors under the Project, observe the highest standard of ethics during the performance, procurement and execution of such contracts. In pursuance of this requirement, WAPCOS Limited, defines, for the purposes of this provision, the terms set forth below:
  - i. "Corrupt Practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
  - "Fraudulent Practice" means any act of submission of forged documentation, or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation, or to succeed in a competitive bidding process;
  - "Coercive Practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
  - iv. "Collusive Practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

Will reject the award of Contract, even at a later stage, if it determines that the bidder recommended/ selected for award/awarded has, directly or through an agent, engaged in Corrupt, Fraudulent, Collusive, Or Coercive Practices in competing for the Contract;

Will sanction a party or its successors, including declaring ineligible, either indefinitely or for

a stated period of time, to participate in any further bidding/procurement proceedings under the Project, if it at any time determines that the party has, directly or through an agent, engaged in Corrupt, Fraudulent, Collusive, Or Coercive Practices in competing for, or in executing, the contract; and the party may be required to sign an Integrity Pact, if required; and WAPCOS Limited will have the right to require the bidders, or its suppliers, contractors and consultants to permit WAPCOS Limited to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by WAPCOS Limited at the cost of the bidders.

The bidder must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a bid and for entering into a contract, must examine the Drawings, must inspect the sites of the work, acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto. WAPCOS Limited will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

- a) All bidders are hereby explicitly informed that conditional offers or offers with deviations from the Conditions of Contract, the bids not meeting the minimum eligibility criteria, Technical Bids not accompanied with EMD and Tender Document Fees of requisite amount in acceptable format, Bids in altered/modified formats, or in deviation with any other requirements stipulated in the tender documents are liable to be rejected.
- b) The company reserves the right to waive minor deviations if they do not materially affect the capability of the Tenderer to perform the contract
- c) The bidders shall not tamper or modify any part of the tender documents in any manner. In case in part of the bid is found to be tampered or modified at any stage, the bids are liable to be rejected, the contract is liable to be terminated and the full earnest deposit/retention money/performance guarantee will be forfeited and the bidder will be liable to be banned from doing any business with WAPCOS Limited.
- d) Incomplete Price bid shall be liable to be rejected, at the discretion of WAPCOS Limited. The total bid price shall cover the entire scope of works covered in the tender.

#### 3.0 EARNEST MONEY DEPOSIT (EMD) / BID SECURITY

The Earnest Money Deposit shall be as per the details mentioned in NIT. EMD shall not carry any interest. The Bid Security/ EMD of the unsuccessful bidder shall be returned at the earliest after expiry of final bid validity period and latest by 30<sup>th</sup> days after the award of the contract. Bid Security shall be refunded to the successful bidder on receipt of Performance Security.

The successful bidder shall accept the Letter of Award (LOA) within 15 (Fifteen) days from receipt of the same, failing which the EMD shall be forfeited and the award of work may be liable to be cancelled.

If any bidder withdraws or make any changes in his offer already submitted before the expiry of the validity period or any extension thereof without the written consent of the company, the EMD amount will be forfeited for such act of the bidder.

WAPCOS Limited reserves the right of forfeiture of Earnest Money deposit (EMD) in case of the successful bidder.

- i. After opening of Tender, revokes his tender within the validity period or increases his earlier quoted rates.
- ii. Does not commence the work within the period as per LOA/Contract. In case the

LOA/Contract is silent in this regard then within 15 days after award of contract.

The Bid Security will be forfeited in the bidder

- i) withdraws or amends its/ his tender;
- ii) impairs or derogates from the tender in any respect within the period of validity of the tender;
- iii) If the bidder does not accept the correction of his bid price during evaluation; and
- iv) If the successful bidder fails to sign the contract or furnish the required performance security within the specified period.

#### 4.0 LANGUAGE OF BID

The Bid and all related correspondence and documents relating to the Project shall be in English language. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate English translation which shall be certified by a qualified translator. Any material that is submitted in a language other than English and which is not accompanied by an accurate English translation will not be considered.

#### 5.0 BIDDERS RESPONSIBILITY

The bidder is solely responsible for the details of their Bid and the preparation of bids. In no case shall the WAPCOS be responsible for any part of the tender documents submitted by him. Any Site information given in this tender document is for guidance only. The bidder is advised to visit and examine the Site of works and its surroundings at their cost and obtain for themselves on their own responsibility, all information that may be necessary for preparing the tender and entering into a Contract. Irrespective of whether or not the bidders have attended the pre-bid meeting, they shall be deemed to have inspected the Site and its surroundings beforehand and taken into account all relevant factors pertaining to the Site and clarifications/ modifications/ additions given in Pre-Bid meeting or addendum issued in the preparation and submission of the Bid.

The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs. WAPCOS Limited shall in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

#### 6.0 PERIOD OF COMPLETION

The completion period shall be as per NIT. The completion period is for the entire work of planning, execution, approvals, arrangement of materials, equipment, delivery at site including transportation, construction/ installation, testing, commissioning, NoCs & statutory approvals from local bodies and successfully handing over of the entire project to the satisfaction of the Principal Employer/ Employer.

#### 7.0 AMENDMENT OF BID DOCUMENTS

At any time prior to the deadline for submission of bids, the Employer may, for any reason (s), whether at their own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by the issuance of a corrigendum/ addendum. No modification of Bid shall be permissible after last date of submission, whatever may be the reason. The Employer may at their discretion may extend the deadline for submission of Tender/ Bid, if considered necessary.

Any corrigendum/ addendum thus issued shall be part of the bidding documents. Prospective bidders shall download the same from the e-portal and submit along with the submission of Bid as token of acceptance.

#### 8.0 BID VALIDITY PERIOD

Bids validity will be as per NIT. In exceptional circumstances, on expiry / prior to expiry of original bid validity period, the WAPCOS may request the successful bidder for a specified extension in the period of validity. A bidder may accept OR refuse the request of extension of validity period. A bidder agreeing Extension of validity period will not be required/nor permitted to modify his bid. In case of refuse of request of extension of validity period tender will be cancelled.

#### 9.0 CURRENCY OF BID

Bid prices shall be quoted in Indian Rupees.

# **SECTION-II**

## SELECTION AND QUALIFYING CRITERIA

#### SECTION-II

#### **SELECTION AND QUALIFYING CRITERIA**

#### 1.0 SITE VISIT

Intending Bidder(s) are advised to inspect and examine the site at his own cost and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid in order to avoid impractical and non-serious bids. A bidder(s) shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder(s) shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder(s) implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

#### 2.0 PRE-BID MEETING

Prospective bidder requiring any clarification of the bidding documents may notify the Employer via email mentioned in NIT, at least one working day prior to pre-bid meeting. The queries shall be discussed during the pre-bid meeting. Thereafter no further queries/clarifications shall be entertained. The Employer will reply to only those queries which are received before the scheduled time as mentioned above, which are essentially required for submission of bids. The Employer will not reply to the queries which are not considered fit like replies of which can be implied /found in the NIT/Tender Documents or which are not relevant or in contravention to NIT/Tender Documents.

The pre-bid meeting shall be held at the communication address mentioned in NIT. The Addendum/ Corrigendum/Replies to pre bid queries as per Pre bid meeting, shall be uploaded on e-portal & WAPCOS website.

#### 3.0 QUALIFYING CRITERIA: ONLINE TECHNICAL BID SUBMISSION

The intending bidders should only submit bid if he considers himself eligible and possess all the required documents. The Technical Bid shall be uploaded <u>with coloured scanned</u> <u>copies of following documents. All the documents must be Serial wise as stated below</u> <u>along with check list and clearly marked page no. on each page</u>

#### **Content of Check List**

	Table -1			<b></b>
S. N	Particular of Document	Yes	No	Page Nos (from – to)
a)	Authority to Sign the Tender			(
	a) In case of proprietary firm, the Proprietor shall sign			
	with full name, current address OR by the authorized			
	person holding Notarized Power of Attorney issued by			
	the Proprietor for signing of business proposal. The			
	Power of Attorney shall <b>be submitted in original and</b>			
	shall be specific to this Bid submission only and			
	mentioning the name of the work/project			
	b) In case of a Limited Company or Corporation, the			
	Application shall be signed by an authorized person			
	holding the Power of Attorney for signing of business			
	proposal. A certified copy of the Power of Attorney			
	shall accompany the Application.			
	<b>Note:</b> Power of Attorney duly notarized and on a stamp			
	paper of appropriate value, issued for signing the tender			
	documents, make corrections/ modifications, to interact			
	with the Employer and act as the contact person, shall be			
	submitted along with Technical Bid.			
b)	Scanned copy of EMD Documents.			
c)	Scanned copy of Demand Draft for Tender Fees			
d)	Letter of Transmittal For Technical Bid and Financial bid			
	along with Declaration by the bidder on their original			
	letter Head as per given format			
e)	The bidder shall submit "Financial Information"			
,	regarding Turnover, Profit/Loss and Net Worth certificate			
	for Last 5 (five) years ending on the financial year 2022-			
	23 in <b>Form-A</b> duly certified by Statutory Auditor of the			
	firm/company which must carry UDIN (Unique			
	Document Identification Number).			
	• <b>Profit / loss (after Tax):</b> The bidder should not have			
	incurred any loss (profit after tax should be positive)			
	in more than two years during last five years ending			
	2022-23.			
	• Turnover: Average annual financial turnover of			
	bidder should be at least 30% of the estimated cost			
	of work during the immediate last 3 consecutive			
	financial years ending 2022-23			
	• Net Worth: Net worth of the bidder should be			
	positive during the last financial year 2022-23. The			
	requisite certificates must be certified by statutory			
	auditor of the firm/company.			
	The bidder shall attach Balance Sheet and Profit &			
	loss Statement, duly audited by Statutory Auditor of			

	Table -1			
S. N	Particular of Document	Yes	No	Page Nos. (from – to)
	the firm for last 5 (five) years ending on the financial year 2022-23 in support of <b>Form-A</b>			
	Note: This Certificate will be verified through ICAI Portal using UDIN number mentioned in Form-A			
	Note: There is no need to upload entire voluminous balance sheet. However, summarized balance sheet (Audited) and summarized Profit & Loss Account (Audited) for last 05 years shall be uploaded.			
f)	Solvency Certificate The bidder contractor should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Bank Solvency Certificate issued from a Nationalized / Scheduled Commercial Bank approved by Reserve Bank of India (RBI) should be at least 40% of the estimated cost of the work. The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana <u>specific to this Bid submission</u> only and mentioning the name of the work/project. The certificate shall be submitted in original and the colour / b&w copy / scanned copy shall not be accepted. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate <b>Note:</b> This Certificate will be verified from the issuing			
g)	authority by WAPCOS Completed Similar Work Criteria: The bidder should have satisfactorily completed the similar types of works as mentioned below during the last seven years ending previous day of last date of submission of tender. i) One similar completed work costing not less than 80% of the estimated cost of work. Or ii) Two similar completed works of order value each not less than 50% of the estimated cost of work. Or iii) Three similar completed works of order value not less than 40% of the estimated cost of work.			
	Note: <b>Similar work</b> shall mean completed Repair &			

	Table -1 Particular of Document	Yes	No	Page Nos
		100	No	(from – to)
	Maintenance work of Buildings including Civil/			(
	Mechanical/ Electrical/ Plumbing works during last seven			
	years.			
	The value of the work done declared is to be without GST			
	/ Taxes. For the works, where the Taxes or GST is not			
	clearly defined, the value of works shall be considered as			
	including GST and GST @12% shall be deducted for the			
	works completed up to 31.12.2021 and GST @18% shall			
	be deducted for the works completed after 01.01.2022 to establish the value of work done.			
	The value of executed works shall be brought to the			
	current level by enhancing the actual value of work done			
	at a simple rate of 7% per annum, calculated from the			
	actual date of completion mentioned in the completion			
	certificate to the date of floating of this tender.			
	The past experience in similar nature of work and also for			
	additional experience should be supported by certificates			
	issued by the Client's organization. In case, the works /			
	certificates are not verified by the issuing authority, WAPCOS reserves the right to not consider for the award			
	of works. For work experience of private sector, the			
	completion certificates shall be supported with copies of			
	corresponding TDS certificates. In case of mismatch in			
	value in TDS certificate & completion certificate, then			
	value mentioned in TDS certificate will be considered			
	<u>during evaluation</u> .			
	Joint Venture (JV) is not allowed.			
	Note: The completion / experience certificates, along with			
	the supporting documents, shall be got verified from the			
	issuing authority / organizations prior to opening of			
	Financial Bid			
)	Verification of Solvency Certificate and Completion			
-	& Performance Certificates.			
	Verification should be done from the official email id of			
	issuing Authorities. The bidder will provide official e-mail,			
	Landline number of the Issuing Authorities in prescribed			
	Form-C with undertaking. The bidder will ensure the			
	email ids and landline are in working condition.			1

S.	Table -1 Particular of Document	Yes	No	Page Nos
э. N	Particular of Document	res	NO	(from – to)
	If Solvency Certificate, completion, performance			(11011 – 10)
	certificates are not verified by the issuing authority, then			
	it will not be considered for technical evaluation.			
	Note: If the Completion and Performance Certificate are			
	already verified from the issuing authority by WAPCOS,			
	it will not be verified again.			
i)	Bid Capacity as prescribed in Form-D.			
	The bidder should possess the bidding capacity as			
	calculated by the specified formula. The formula			
	generally used is:			
	generally used is.			
	Available bid capacity = A x 1.5 x N – B, where			
	A = Maximum value of engineering (Civil/ Electrical/			
	Mechanical as relevant to work being procured) works			
	executed in any one year during the last five years			
	(updated at the current price level), taking into account			
	the completed as well as works in progress.			
	N = Number of years prescribed for completion of the			
	work in question. R = Value (undeted at the current price level) of the			
	B = Value (updated at the current price level) of the			
	existing commitments and ongoing works to be			
	completed in the next 'N' years.			
	NOTE:			
	The bidder shall furnish statements showing the value of			
	existing commitments and on-going works as well as			
	stipulated period of completion remaining for each of the			
	works separately.			
	The value of executed works shall be brought to the			
	current level by enhancing the actual value of work done			
	at a simple rate of 7% per annum, calculated from the			
	actual date of completion mentioned in the completion			
	certificate to the date of floating of this tender.			
i)	EPF Registration:			
j)	The agency should have EPF registration.			
	The agency should have Lit registration.			
k)	GST Registration & PAN:			
	The bidder shall submit valid GST registration certificate			
	for the state where work is to be executed and PAN Card.			
	If not registered till date of submission of bid, bidder will			

	Table -1			
S. N	Particular of Document	Yes	No	Page Nos. (from – to)
	give undertaking on bidder's letter head stating that they			, ,
	will get registered in GST as per Govt. norms before			
	submitting of 1 <sup>st</sup> bill of executed works.			
I)	Indian Registered Company:			
-	The bidder should be an Indian Registered Company			
	under Companies Act 1956/ Proprietorship Firm/			
	Partnership Firm. Joint ventures are not accepted.			
	Copy of Certificate of Incorporation/ Registration/			
	Partnership Deed Registration or any other relevant			
	document, as applicable, should be submitted along with			
	a copy of address proof.			
	NOTE: Proprietor firms shall submit registration details or			
	shall submit the copy of relevant page of Pass book for			
	the Current Account in the name of Proprietor Firm.			
m)	-			
	The bidder will submit Name, address, details of the			
	organization, Name(s) of the Owner/partners/promoters			
	and Directors of the firm/ company as prescribed in			
	Form-E.			
n)	Undertaking for Manpower Deployment:			
	The bidder will submit "Undertaking for Manpower			
	Deployment" as prescribed in Form -F			
o)	Non - Conviction Certificate:			
	The bidder will submit the undertaking regarding "Non			
	-Conviction Certificate" as prescribed in Form-G.			
p)	No Deviation Certificate:			
	The bidder will submit 'No Deviation Certificate' as			
	prescribed in Form-H.			
q)	Undertaking regarding Blacklisting / Non			
	Debarment			
	The bidder will submit the "Undertaking regarding Blacklisting / Non Debarment" as prescribed in			
	Form-I.			
r)	Undertaking regarding Restriction under Rule			
• /	144(XI) of the General Finance Rules (GFRs) 2017			

Table -1				
S. N	Particular of Document	Yes	No	Page Nos. (from – to)
	The bidder will submit the "Undertaking regarding Restriction under Rule 144(XI) of the General Finance Rules (GFRs) 2017" as prescribed in <b>Form –J</b> .			
s)	<ul> <li>Preference to Make in India:</li> <li>The bidder shall submit undertaking indicating percentage of local content used during the execution of work as per the order of Public Procurement (Preference to Make in India) as prescribed in Form-K duly signed by Statutory Auditor and must carry UDIN (Unique Document Identification Number)</li> <li>Note: This Certificate will be verified through ICAI Portal using UDIN number mentioned in Form-K</li> </ul>			
t)	<b>Understanding The Project Site</b> The bidder will submit the "Understanding The Project Site" as prescribed in <b>Form –M</b> .			

#### 4.0 OFFLINE SUBMISSIONS OF DOCUMENTS

The bidder shall submit following Document offline in separate envelope clearly labeled as "OFFLINE DOCUMENTS" for the Work (Write Name of Work/Project as mentioned in NIT) along with Details of bidders Address, Phone, E-mail on Envelope. The bidder failing to submit the offline documents, the bid shall be summarily rejected.

- 1) Proof of submission of EMD and Tender Fee
- 2) A copy of signed Tender Document as Token of acceptance
- 3) In addition to above, the bidder shall submit all the documents and supporting documents mentioned in Table-1, Section -II of Tender Document.

**NOTE:-** The above offline documents shall be submitted by bidder on WAPCOS address on or before the date & time of submission mentioned in NIT. No bid shall be accepted after the due date and time of submission of offline bid. The non-Submission of offline bids or the offline bids received after the due date of submission and time, by post or by hand, shall be summarily rejected.

#### 5.0 CONTENTS OF FINANCIAL BID

The Financial Bid should be uploaded online before last date & time of submission of Tender Document.

Quoted amount by the bidder shall be firm during the performance of the Contract. Quoted amount by the bidder with any condition shall not be accepted and same is liable to be rejected

Quoted amount by the bidder shall include all Materials, Tools & Plant, labour, supervision, profit; other levies together with all general risks, liabilities and obligations set out or implied in the contract, applicable Labour Cess, cost of insurance to this contract, all applicable tax liabilities like Income Tax & Surcharges, etc. Any other taxes /cess as per Government directives shall be deducted from each bill paid to the Contractor, from time to time. GST shall be payable extra as per prevailing rates.

The Contractor shall submit e-invoice / Tax Invoice (as applicable for the bidder's Firms) to WAPCOS showing (i) Basic amount (ii) GST amount separately in each bill. It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST), shall be reimbursed to the Agency only after uploading of bills by Contractor on GST Portal "to avail Input benefit of GST".

The WAPCOS shall be performing all its duties of deduction of TDS and other deduction on payment made to the contractor as per applicable legislation in force on the date of submission of bid or to be newly/amended introduced during the execution of the Contract.

#### 6.0 OPENING OF FINANCIAL BID

The financial bids of the technically qualified bidders shall be opened at the notified date & time. Final selection of the bidder will be made based on the least cost method.

#### 7.0 SIGNING OF THE CONTRACT

The letter of Award will be issued to the successful bidder by WAPCOS which will be duly signed & stamped by the successful bidder as token of unequivocal acceptance and confirmation within 5 working days. Subsequently, successful bidder shall submit the Performance Security of required value within the specified time period. Thereafter, on a date and time mutually agreed upon, the successful bidder or his authorized representative shall attend the office for signing of the Contract Agreement.

Failure on the part of the successful bidder to comply with the above requirements will constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security.

# **SECTION – III**

### FORMS

	LETTER OF TRANSMITTAL FOR TECHNICAL BID AND
	FINANCIAL BID ALONG WITH DECLARATION
FORM-A	FINANCIAL INFORMATION
FORM-B	SOLVENCY CERTIFICATE
FORM-C	CORRESPONDENCE DETAILS OF ISSUING AUTHORITY
FORM-D	BID CAPACITY
FORM-E	STRUCTURE & ORGANISATION
FORM-F	UNDERTAKING FOR MANPOWER DEPLOYMENT
FORM-G	NO CONVICTION CERTIFICATE
FORM-H	NO DEVIATION CERTIFICATE
FORM-I	UNDERTAKING REGARDING BLACKLISTING / NON
	DEBARMENT
FORM-J	UNDERTAKING FOR RESTRICTION UNDER RULE 144(XI) OF
	GFRs
FORM-K	PREFERENCE TO MAKE IN INDIA
FORM-L	UNDERSTANDING THE PROJECT SITE

#### LETTER OF TRANSMITTAL FOR TECHNICAL BID

To, The Chief Engineer Construction Management Unit-III 1st floor, Plot no. 148, Sector- 44, Gurugram, Haryana-122003 Email: projects@wapcos.co.in Contact No. +91124-4488018

Subject: Submission of Bids for .....

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

- i. I / We acknowledge that the WAPCOS will be relying on the information provided in the Bid and the documents accompanying the Bid & detailed provided in the enclosed "Forms" for selection of the Contractor for the aforesaid Project, and we certify that all information provided in the Bid are true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Bid are true copies of their respective originals.
- ii. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- iii. I/we submit the requisite Solvency Certificate, Completion Certificates, Financial Information's and authorize WAPCOS Ltd. to approach the Issuing Authority to confirm the correctness thereof. I/we also authorize WAPCOS Ltd. to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- iv. I/ We acknowledge the right of the Authority to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- v. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Name of work	Certificate from

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### LETTER OF TRANSMITTAL FOR FINANCIAL BID

Dated:

To The Chief Engineer Construction Management Unit-III 1st floor, Plot no. 148, Sector- 44, Gurugram, Haryana-122003 Email: projects@wapcos.co.in Contact No. +91124-4488018

Sub: Financial Bid for the .....

Dear Sir,

With reference to this Tender Document, I/we, having examined the Bidding Documents and understood their contents, hereby submit my/our Bid for the aforesaid Project. The Bid is unconditional and unqualified.

- 1. The Cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
- 2. I / We shall keep this offer valid as period specified in the NIT.
- 3. I / We hereby submit our FINANCIAL BID and Offer Cost as filled in format given on online portal for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

Yours faithfully,

Date:

(Signature, name and designation of the Authorized signatory)

Place:

Name and seal of bidder

#### **DECLARATION BY THE BIDDER**

This is to certify that We, M/s ....., in submission of this offer confirm that:-

We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. We have carefully gone through each & every section of the tender document for the work ".....".

- 1. Our tender is offered taking due consideration of all factors mentioned in tender documents.
- 2. We promise to abide by all the stipulations of the Contract documents and carry out and complete the work to the satisfaction of the Employer/ Principal Employer.
- 3. We also agree to procure Plants and Machineries at our cost required for the work. We also submit that we have Organizational Structure comprising adequate Technical Personnel in the line of requirement. We also agree to accomplish the job entrusted to us in the stipulated time laid out in document except situations not under our control.
- 4. We have not made any misleading or false representation in the forms, statement and attachments in proof of the qualification requirements;
- 5. We do not have records of poor performance such as abandoning the work, not properly completing the Contract, inordinate delays in completion or financial failures etc.
- 6. We have submitted all the supporting documents and furnished the relevant details as per prescribed format.
- 7. We are financially sound and have not applied or be under corporate debt restructuring.
- 8. List of Similar Works satisfying Qualification Criterion as indicated hereinafter, does not include any work which has been carried out by us through a Subcontractor on a back-to-back basis.
- 9. The Cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
- 10. I / We shall keep this offer valid as period specified in the NIT.
- 11. I / We hereby submit our FINANCIAL BID and Offer Cost for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.
- 12. In the event of my/ our being declared as the Selected bidder, I/we agree to enter into a Agreement in accordance with the format of Contract Agreement. We agree not to seek any changes in the aforesaid format of Contract Agreement and agree to abide by the same.

#### Certificate:

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

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR OF BIDDER1

Years	Gross Annual turnover	Profit/Loss (After Tax)	Net worth
2018-2019			
2019-2020			
2020-2021			
2021-2022			
2022-2023			

#### FORM-A: FINANCIAL INFORMATION

Above Details are being furnished as per the figures in balance sheet for the last five years in respect of M/s ......(Name & address of firm of bidder), as submitted by the firm to the Income Tax Department.

Date:

(Signature of Statutory Auditor with Seal) UDIN No. :

#### **TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK**]

#### FORM- B: SOLVENCY CERTIFICATE

To WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana Name of Work: ...... This is certify that to the best of our knowledge and information that M/s .......(name of bidder & address).....

(Signature for The Bank)

#### FORM-C: CORRESPONDENCE DETAILS OF ISSUING AUTHORITY

#### Solvency Certificate/ Completion Certificate / Performance Certificate

Name of Work: .....

#### A. Earnest Money Deposit (EMD)

Present address of the Issuing Branch	Official Email Id	Landline no	Other Contact no.	

#### **B.** Solvency Certificate

Present address of the Issuing Branch	Official Email Id	Landline no	Other Contact no.	

#### C. Completion Certificate

Present address of the	Official Email Id	Landline no	Other Contact no.	
Issuing Authority				

This is to certify that above information is correct and is gathered from the Issuing Authorities by us for the verification of concerned documents. We understand that if the document is not verified by the issuing authority, then our bid is liable to be rejected.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM- D: BID CAPACITY

Name of Work: .....

#### Available bid capacity = $A \times 1.5 \times N - B$

#### Where,

A = Maximum value of engineering (Civil/ Electrical/ Mechanical as relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the work in question.

B = Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N' years.

#### Existing Commitments & on-going works details:

Description of work	Location	Contract no.	Name of address of Client	Value of Contract (Rs. Cr.)	Stipulated period of completion	Value of remaining work (Rs. cr.)	Anticipated date of completion

#### NOTE:

The bidder shall furnish statements showing the value of existing commitments and on-going works as well as stipulated period of completion remaining for each of the works separately.

The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the date of completion of last day of the month previous to the one in which applications are invited.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM- E: STRUCTURE & ORGANISATION

Name of Work: .....

S.No.	Particulars	Details
1.	Name & Registered Address of the bidder	
2.	Address and Email on which correspondence will be made during Tendering & after Award of Work	Name of Person: … <u>who will sign tender</u> Mobile No. : Email: Address:
3.	Telephone no./Mobile no./Fax no.	
4.	Legal status of the bidder (attach copies of original document defining the legal status) (a) A Proprietary Firm (b) A Partnership Firm (c) A Limited Company or Corporation (d)A Company registered under company's Act 1956/2013	
5.	Particulars of Registration with various Government Bodies (Attach attested photocopy) <b>Organization/Place of Registration</b> 1. 2. 3.	Registration No. 1. 2. 3.
6.	Names and Titles of Directors with designation as per Legal Status of Company	
7.	Designation of Senior Level Officers authorized to act for this work	
8.	Any other information considered necessary but not included above.	

Date:

Place:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM- F: - UNDERTAKING FOR MANPOWER DEPLOYMENT

#### Name of Work : .....

This is to certify that We, M/s ....., in submission of this offer confirm that:-

- Our tender is offered taking due consideration of all factors including site requirements information and conditions stated in the detailed Instructions to bidders to execute the work up to the standards as laid out in Employer's Requirements and other sections of Tender Document.
- II. We agree to employ the number of technical staff during the execution of this work as defined in the tender document. We shall deploy additional manpower as deemed fit and required to complete the project within stipulated completion period, without any additional cost to the Employer.
- III. WAPCOS shall have full power and without giving any reason to us, immediately to get removed any representative, staff and workmen or employees on account of misconduct negligence or incompetence or whose continued employment may in his opinion be undesirable. We shall not claim any compensation on this account.
- IV. In case we fail to deploy the technical staff as mentioned in the tender document, we shall be liable to pay recovery for each month of default as mentioned in Tender Documents. The details of Deployment of Technical Staff will be submitted with each Bill duly certified by The Project Manager, WAPCOS. We shall not raise any objection if deduction is made for the same from Running Bills.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM-G: NO-CONVICTION CERTIFICATE

Name of Work: .....

This is to certify that \_\_\_\_\_\_ (Name of the organization), having registered office at \_\_\_\_\_\_ (Address of the registered office) has never been convicted by any Central / State Government Department or Court of law anywhere in the country.

This is also to certify that we are not involved in any form of Corrupt and Fraudulent Practices in past and will never be involved in future.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM-H: NO DEVIATION CERTIFICATE

Name of Work: .....

This is to confirm that as per Tender conditions we have visited site before submission of our Offer and noted the job content and site condition etc. We also confirm that we have not changed/modified the above tender document and in case of observance of the same at any stage it shall be treated as null and void.

We hereby also confirm that we have not taken any deviation from Tender Clause together with other reference as enumerated in the above referred Notice Inviting Tender and we hereby convey our unconditional acceptance to all terms & conditions as stipulated in the Tender Document.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null and void.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

#### FORM-I: UNDERTAKING REGARDING BLACKLISTING / NON DEBARMENT

Name of Work: .....

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Ltd. Further, we hereby Confirm and declare that we, M/s\_\_\_\_\_\_\_, is not blacklisted/ De-registered/debarred by any Government Department/Public Sector Undertaking /Private Sector/ or any other agency for which we have Executed / Undertaken the works/ Services during the last 5 Years.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

# FORM-J: UNDERTAKING FOR RULE 144 (XI) IN THE GENERAL FINANCIAL RULES-2017

Name of Work: .....

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

# [TO BE SUBMITTED ON <u>ORIGINAL</u> LETTER HEAD OF STATUTORY AUDITOR OF BIDDER]

# FORM-K: UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT

Name of Work: .....

We,,	a Chartered	Accountant firm	having our	registered office
address		hereby	state that,	we are Statutory
Auditor of the Company M/s		(CIN :		).

The bidder is bidding for the "...... (Name of work)

We have understood the provisions of Public Procurement (Preference to make in India) Local content Policy against WAPCOS Tender NIT No. ..... Date -

We on the basis of the bidder's representation received, hereby confirm that, offer is achieving the minimum local content target as per of above Policy shall be **50%**.

Date:

(Signature of Statutory Auditor with Seal) UDIN No. :

Place:

# [TO BE SUBMITTED BY BIDDER ON THEIR ORIGINAL LETTER HEAD]

# FORM-L: UNDERSTANDING THE PROJECT SITE

#### Name of Work: .....

I/we hereby certify that I/we have examined & inspected the site & its surrounding satisfactorily, where the project is to be executed. I/ We are well aware about the following

- Location of the land demarcated for the execution of work and approach/ accessibility to the site.
- Availability of all construction material required for the execution of work.
- Location of the proposed buildings and its allied works on demarcated land.
- Sources from where electric connection is to be taken by contractor at the time of mobilization or other arrangements for electricity is to be made.
- Sources from where suitable water for construction is to be arranged.
- Site clearance and location of matured trees.
- Awareness about the surrounding local conditions, villagers etc.
- Topography, contouring and any other relevant feature like Pond, nallah etc. of the land where the project is to be executed.
- Nature of the ground & sub-soil of the site and accessibility to the site.
- Location of local electrical supply line and other relevant services
- Hindrances / dispute, if any, which may arise during the execution of work

I / We hereby submit our BID considering above all facts gathered during site visit and each & every aspect have been considered in the Quoted percentage Rates / price.

Date:

(Signature, Name, Designation of the Authorized signatory with Seal)

Place:

# SECTION – IV

# **GENERAL CONDITIONS OF CONTRACT**

# SECTION - IV

# **GENERAL CONDITIONS TO CONTRACT**

#### 1.0 GENERAL RULES AND DIRECTIONS

	1	
General Rules	1.	The work proposed for execution by contract will be notified in a form of
& Directions		invitation to tender by publication in website.
		This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance Security to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills.
	2.	In the event of the tender being submitted by a Partnership firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power of Attorney authorizing him to do so, such power of
		attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
	3.	Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm
Applicable for	4.	The rate(s) must be quoted in decimal coinage. Total Amount must be
Items Rate		quoted in full rupees by ignoring fifty paisa and considering more than
tender only		fifty paisa as rupee one.
		In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised online offer (through limited tender process) quoting rate/ cost of work of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.
		If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in presence of WAPCOS and the lowest contractors those have quoted equal amount of their tenders.
		In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated

		as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited.
		In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors. Contractor, whose earnest money is forfeited because of non- submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work
Applicable for Percentage Rate/ EPC tender only	4A	<ul> <li>In case of Percentage Rate /EPC Tenders, contractor shall fill up the usual printed`form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities, he will be willing to execute the work. The tender submitted shall be treated as invalid if :-</li> <li>1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.</li> <li>2. The percentage above/below is not quoted in figures &amp; words both on the total amount of tender or any section/sub head of the tender.</li> <li>3. The percentage quoted above/below is different in figures &amp; words on the total amount of tender or any section/sub head of the tender.</li> </ul>
		Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.
	4B	In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered amount or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.
		If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence WAPCOS & the lowest contractors those have quoted equal amount of their tenders.

	5.	In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor, whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work. The designated committee will open tenders in the presence of any
		intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
	6.	The officer Inviting Tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender
	7.	The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
Applicable for	8.	In the case of Item Rate Tenders, only rates quoted shall be
Items Rate		considered. Any tender containing percentage below/above the rates
tender only		quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly. However, if a tenderer quotes nil rates against each item in item rate
		tender, the tender shall be treated as invalid and will not be considered as lowest tenderer and earnest money deposited shall be forfeited
Applicable for Percentage Rate /EPC tender only	9.	as lowest tenderer and earnest money deposited shall be forfeited. In case of Percentage Rate / EPC Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy

Applicable for 10.	In Percentage Rate /EPC Tender, the tenderer shall quote				
Percentage	percentage below/above (in figures as well as in words) at which he				
Rate EPC	will be willing to execute the work. He shall also work out the total				
tender only	amount of his offer and the same should be written in figures as well				
	as in words in such a way that no interpolation is possible. In case of				
	figures, the word 'Rs.' should be written before the figure of rupees and				
	word 'P' after the decimal figures, e.g. 'Rs. 2.15P and in case of words,				
	the word 'Rupees' should precede and the word 'Paisa' should be				
	written at the end.				
11.	i. The Contractor, whose tender is accepted, will be required to furnish				
	Performance Security of 5% of the Tendered Value. This Security				
	shall be in the form of cash (in case Security amount is less than Rs.				
	10,000/-) or Deposit at call receipt of any scheduled bank/Banker's				
	cheque of any scheduled bank/Demand Draft of any scheduled				
	bank/Pay order of any scheduled bank (in case Security amount is				
	less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit				
	Receipts or Guarantee Bonds of any Scheduled Bank or the State				
	Bank of India in the with the prescribed form.				
	ii. The contractor whose tender is accepted will also be required to				
	furnish by way of Security Deposit for the fulfillment of his				
	contract, an amount equal to 5% of the value of each Running				
	& Final bill. The Security deposit will be collected by deductions				
	from the running bills as well as final bill of the contractor at the rates				
	mentioned above. The Security amount will also be accepted in cash				
	or in the shape of Government Securities. Fixed Deposit Receipt of				
	a Scheduled Bank or State Bank of India will also be accepted for				
40	this purpose provided confirmatory advice is enclosed				
12.	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.				
13.	GST or any other tax applicable in respect of inputs procured by the				
	contractor for this contract shall be payable by the Contractor and				
	Government will not entertain any claim whatsoever in respect of the				
	same.				
14.	The contractor shall give a list of WAPCOS employees related to him.				
15.	The tender for composite work includes, in addition to building work, all				
	other works such as sanitary and water supply installations drainage				
	installation, electrical work, horticulture work, roads and paths etc.				

		CONTRACT
Definitions	1.	The " <b>Contract</b> " means the documents forming the tender and acceptance thereof and the formal Agreement executed between the WAPCOS and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-In-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
	2.	In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to
		<ul> <li>them:-</li> <li>i. "Employer" shall mean WAPCOS Limited/ WAPCOS, A Government of India undertaking- Ministry of Jal Shakti, for execution of the Work / Project as mentioned in NIT, having their Registered office at 5<sup>th</sup> floor, Kailash building, 26-Kasturba Gandhi Marg, New Delhi-110001, India &amp; include Engineer-in-charge, Project Manager, their successors &amp; permitted assigns as well as their authorized officer / representatives. WAPCOS Limited is a company registered under the Indian Company Act 1956, with its registered office at New Delhi or its Administrative officers or its Engineer or other employees authorized to deal with any matter with which these persons are concerned and authorized on its behalf.</li> <li>ii. Principal Employer/Owner" Assam University (AU), who has appointed WAPCOS Ltd. as Project Management Consultant for the work mentioned in NIT.</li> </ul>
		iii. "Bidder/Tenderer/Contractor/Supplier" 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 who are participating in Bidding process and will Execute the project after award of the Works as Contractor/Supplier. They should be an Indian Registered Company under Companies Act 1956/ 2013, Proprietorship Firm/ Partnership Firm.
		iv. "Work or Project" means as mentioned in NIT.
		<ul> <li>v. "Site and location" means 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 as mentioned in NIT.</li> <li>vi. "Engineer-in-Charge" means the Officer appointed by WAPCOS</li> </ul>
		who shall direct, supervise and sign the Contract Agreement on

#### 2.0 CONDITIONS OF CONTRACT

	1	hat all at MADOOO for the number of Ornterst on his date
		behalf of WAPCOS, for the purpose of Contract or his duly
		authorized representative.
		vii. "Project Manager, WAPCOS" shall mean the officer appointed
		by WAPCOS to supervise the works at site on behalf of WAPCOS
		and Authorized by the Engineer-in charge.
		viii. <b>Excepted Risk</b> are risks due to riots (other than those on account
		of contractor's employees), war (whether declared or not)
		invasion, act of foreign enemies, hostilities, civil war, rebellion
		revolution, insurrection, military or usurped power, any acts of
		Government, damages from aircraft, acts of God, such as
		earthquake, lightening and unprecedented floods, and other
		causes over which the contractor has no control and accepted as
		such by the Engineer-in-charge or causes solely due to use or
		occupation by Government of the part of the works in respect of
		which a certificate of completion has been issued or a cause solely
		due to Government's faulty design of works.
		ix. "Market Rate" shall be the rate as checked & verified by the
		Project Manager, WAPCOS and agreed 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 Special Conditions of Contract to cover, all overheads and
		profits.
		x. "Schedule(s)" referred to in these conditions shall mean the
		relevant schedule(s), standard Schedule of Rates of the
		government mentioned in Special Conditions of Contract.
		xi. <b>"Consultant"</b> means any consultant nominated by the WAPCOS
		xii. <b>"Tendered Amount"</b> means the value as quoted by the bidder
		during bidding process excluding GST.
		xiii. <b>"Tendered Value"</b> means the value of work as stipulated in the
		letter of award excluding GST.
		xiv. "Contract Price" means the value of work executed under the
		Contract including tendered value, cost of extra items, cost of
		substituted items, cost of deviated items, works executed under
		the Contract including GST.
		5
		xv. <b>"Date of Commencement of Work</b> " The date of commencement
		of work shall be the date of start as specified in Letter of Award or
		the first date of handing over of the site, whichever is later, in
		accordance with the phasing if any, as indicated in the tender
		document.
0	-	xvi. <b>GST</b> means Goods & Service tax- Central, State and Inter State
Scope and	3.	Where the context so requires, words imparting the singular only also
Performance		include the plural and vice versa. Any reference to masculine gender
		shall whenever required include feminine gender and vice versa.
	4.	Headings and Marginal notes to these General Conditions of Contract
		shall not be deemed to form part thereof or be taken into consideration
		in the interpretation or construction thereof or of the contract.
	5.	The contractor shall be furnished, free of cost one certified copy of the
		contract documents except standard specifications, and such other
		printed and published documents, together with all drawings as may be
•	•	•

	1	forming part of the tender penare. None of these desurgents shall be
		forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
Works to be	6.	The work to be carried out under the Contract shall, except as otherwise
carried out	0.	provided in these conditions, include all labour, materials, tools, plants,
carrieu out		
		equipment and transport which may be required in preparation of and
		for and in the full and entire execution and completion of the works. The
		descriptions given in the Schedule of Quantities/ Building Components
		shall, unless otherwise stated, be held to include wastage on materials,
		carriage and cartage, carrying and return of empties, hoisting, setting,
		fitting and fixing in position and all other labours necessary in and for
		the full and entire execution and completion of the work as aforesaid in
		accordance with good practice and recognized principles.
Sufficiency	7.	The Contractor shall be deemed to have satisfied himself before
of Tender		tendering as to the correctness and sufficiency of his tender for the works
		and of the cost quoted in the Schedule of Quantities/ Building
		Components, which rates and prices shall, except as otherwise provided,
		cover all his obligations under the Contract and all matters and things
		necessary for the proper completion and maintenance of the works.
Discrepancies	8.	The several documents forming the Contract are to be taken as mutually
and Adjustment		explanatory of one another, detailed drawings being followed in
of Errors		preference to small scale drawing and figured dimensions in preference
		to scale and special conditions in preference to General Conditions.
	8.1	In the case of discrepancy between the schedule of Quantities/Building
	••••	Components, the Specifications and/ or the Drawings, the following order
		of preference shall be observed:-
		i. Description of Schedule of Quantities/ Building Components.
		ii. Particular Specification and Special Condition, if any.
		iii. Drawings.
		iv. Standard Specifications.
		v. Indian Standard Specifications of B.I.S.
	8.2	If there are varying or conflicting provisions made in any one document
	0.2	forming part of the contract, the Engineer-in-charge shall be the deciding
		authority with regard to the intention of the document and his decision
	8.3	shall be final and binding on the contractor.
	0.3	Any error in description, quantity or rate in Schedule of Quantities or any
		omission therefrom shall not vitiate the Contract or release the
		Contractor from the execution of the whole or any part of the works
		comprised therein according to drawings and specifications or from any
Olauria (		of his obligations under the contract.
Signing of	9.	The letter of Award will be issued to the successful bidder by WAPCOS
Contract		which will be duly signed & stamped by the successful bidder as token
		of unequivocal acceptance and confirmation. Subsequently, successful
		bidder will submit the Performance Security of required value within time
		specified in Tender document. Thereafter, on a date and time mutually
		agreed upon, the successful bidder or his authorized representative shall
		attend the office for signing of the Contract Agreement.
		The contract Agreement consisting of complete Tender Document along
		with all the documents Corrigendum/Amendments if any, Clarifications /

Correspondences and any other documents as forming part of the contract. No payment for the work done will be made unless contract is signed by the contractor.
Failure on the part of the successful bidder to comply with the above requirements will constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security.

#### 2.0 CLAUSES OF CONTRACT

#### CLAUSE 1: PERFORMANCE SECURITY (OR PERFORMANCE BANK GUARANTEE)

- i. The contractor shall submit an irrevocable Performance Security of 5% (Five percent) of the "Tendered Value" 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 Special Conditions of Contract 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 Special Conditions of Contract on written request of the contractor stating the reason for delays in procuring the Performance Security, to the satisfaction of the Engineer-in-Charge. This Security shall be in the form of Cash (in case Security amount is less than Rs. 10,000/-) or Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case Security amount is less than Rs. 1,00,000/-) or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the WAPCOS as part of the performance Security 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 WAPCOS to make good the deficit.
- ii. The Performance Security shall be initially valid up to period of 60 (sixty) days beyond the date of completion of all contractual obligations of the contractor, including Defect Liability Period (DLP) plus 1 year claim period beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Security extended to cover such enlarged time. The performance Security shall be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including completion of the Defect Liability Period.
- iii. The Engineer-in-Charge shall make a claim under the performance Security except for amounts to which the WAPCOS is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- iv. Failure by the contractor to extend the validity of the Performance Security as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Security.
  - a) Failure by the contractor to pay WAPCOS 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.
- v. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance Security shall stand forfeited in full and shall be absolutely at the disposal of the WAPCOS.

#### CLAUSE 1A: SECURITY DEPOSIT / RETENTION MONEY

The bidder whose tender(s) may be accepted shall permit WAPCOS at the time of making any payment to Contractor for work done under the contract to deduct a sum at the rate of 5% from each running and final bill excluding GST.

The Security Deposit as deducted above shall be released within 60 days of successful completion of Warranty/Defect Liability as Certified by the Engineer-in-Charge or till the final bill has been prepared and passed whichever is later.

#### CLAUSE 2: COMPENSATION FOR DELAY i.e. LIQUIDITY DAMAGE

If the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under purview of the Contract on account of such breach, pay compensation for delay i.e. Liquidity Damage, a sum not less than 0.5% (Zero point five percent) of the Tendered Value as aforesaid for each week and limited to 10% of the Contract Price. If, still work is not completed by the Contractor after deduction of full Liquidity Damage i.e. 10% of the Contract Price, then Performance Security shall be invoked and deducted security money shall be forfeited and project will be terminated. After that the balance work will be executed by Employer on risk and cost (amount recovered from invocation of Performance Security and Security deposit) of contractor.

In case Liquidity Damage imposed by Principal Employer to the project at any point of time, then full amount of Liquidity Damage (10% of the Contract Price) will be recovered from the up-coming interim bills/ final bill. If the amount of up-coming interim bills/ final bill is less than the amount of Liquidity Damage, then balance amount of Liquidity Damage will be recovered from the Performance Security, Security Deposit and any other financial deposit of Contractor with Employer.

#### **CLAUSE 3: WHEN CONTRACT CAN BE DETERMINED**

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:

- i. 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.
- ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iii. 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.

- iv. 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.
- v. If the contractor shall offer or give or agree to give to any person in WAPCOS 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 WAPCOS.
- vi. If the contractor shall enter into a contract with WAPCOS 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.
- vii. If the contractor had secured the contract with WAPCOS as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- viii. 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.
- ix. 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.
- x. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- xi. 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 WAPCOS shall have powers:
  - (a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, Security Deposit already recovered, Security deposit payable and Performance Security under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
  - (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work. In the event of

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

#### Note:

Actions under Clause 2 and 3 are independent.

The compensation under Clause 2 is for loss caused due to delay in performance, whereas, the compensation under Clause 3 is for consequential losses due to non-performance of the Contract. Hence, the Employer is entitled to compensation under Clause 3 and Clause 2 independently. Hence, the Employer is empowered to take action under Clause 2 for levy of compensation depending on liability of Contractor under Clause 2 based on the delay at the stage of Clause 3 action, before determination.

#### **CLAUSE 3A**

In case, the work cannot be started due to reasons not within the control of the contractor within 1/6th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract. In case contractor wants to close the contract, he shall give notice to the WAPCOS stating the failure on the part of WAPCOS. In such eventuality, the Performance Security of the contractor shall be refunded within following time limits :

a)	Tendered value of work is up to Rs. 1.0 Crore	15 days
b)	If the Tendered value of work is more than Rs.1.0 crore and up to Rs. 10 Crore	21 days
c)	If the Tendered value of work exceeds Rs. 10 Crore :	30 days

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

#### CLAUSE 4: CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN UNDER CLAUSE 3

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

in such notice) in the event of the contractor failing to comply with any such requisition, the Engineerin-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

#### CLAUSE 5: TIME AND EXTENSION FOR DELAY

The time allowed for execution of the Works as specified in Contract 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 Contract or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, WAPCOS shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance Security absolutely.

5.1 As soon as possible but within 7 (seven) days from the date of commencement of work, the Contractor shall submit a Time and Progress Chart for each milestone and get it approved by the Engineer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Employer 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 15 days (save for special jobs for which a separate programme has been agreed upon) complete the work as per scheduled date of completion.

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.

The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.

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 of Rs. 2500/- per day basis in case of delay in submission of Time and Progress Chart and Rs. 1000/- per day in case of delay in submission of the monthly progress report.

# 5.2 If the work(s) be delayed by:-

- (i) force majeure, or
- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (v) delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- (vi) any other cause 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 authority, but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Employer/ Principal Employer to proceed with the works. The Employer will give the "Extension of Time" only after the approval of the same from Principal Employer.

If, Employer/Principal Employer are not satisfied with the reasons stated by the contractor for delay then, Provision Extension of Time shall be granted to complete the balance works and keep the contract alive. In the period of Provisional Extension of time, Employer shall have the right to impose Liquidity damage as per above Clause 2, if Principal Employer impose the Liquidity Damage to the project at any point of time.

During the granted provisional extension of time, 10% amount of bill amount excluding GST, shall be withheld from each running bill as per the discretion of the Engineer-in-charge. The withheld amount will be accountable to Liquidity damage as per clause-2 and shall only be released to the contractor, if work is completed within the given Provisional Extension of time and Principal Employer didn't impose the Liquidity Damage to the project.

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

- **5.3** In case the work is hindered by the Employer/ Principal Employer for any reason / event, the Engineer-in-Charge, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub-clause and sub-clause 5.2 to the extent the delay is covered under sub-clause 5.2 the Contractor shall be entitled to only extension of time and no compensation/damages.
- **5.4** Request for rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the Engineer-in-Charge. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. 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. An amount as deemed appropriate by the Engineer-in-Charge shall be deducted on per day basis in case of delay in submission of the revised programme.
  - **5.4.1** In any such case the Engineer-in-Charge may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. Engineer-in-Charge shall finalize/ reschedule a particular mile stone before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-

application by the Contractor for extension of time Engineer-in-Charge 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.

**5.5** 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 sub clause 5.2 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The Contractor shall be liable for levy of compensation for delay for such extension of time.

#### CLAUSE 6 : COMPUTERIZED MEASUREMENT BOOK

Project Manager, WAPCOS shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.

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

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

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Project Manager, WAPCOS. 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 WAPCOS a computerized measurement book, duly bound, and with its pages machine numbered. The Project Manager, WAPCOS, would thereafter check this MB, and record the necessary certificates for their checks/test checks.

The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound.

The contractor shall also submit to the WAPCOS separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered. Thereafter, this bill will be processed by the Project Manager, WAPCOS.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Project Manager, WAPCOS.

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

The contractor shall give not less than seven days' notice to the Project Manager, WAPCOS 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 Project Manager, WAPCOS 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 Project Manager, WAPCOS consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

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

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

# CLAUSE 7: PAYMENT ON INTERMEDIATE CERTIFICATE TO BE REGARD AS ADVANCE

The interim or running account bill shall be submitted by the Contractor for work executed on the basis of recorded measurements on the format of the Employer on or before the date of every month fixed by Project Manager of WAPCOS. Contractor shall submit the bill with all requisite certificates/ documents. Project Manager of WAPCOS shall arrange to have the bill verified by taking or causing to be taken where necessary, the requisite measurement of the work within 15 working days. Observations if any shall be conveyed by the Project Manager, WAPCOS to the Contractor within 25 working days. Contractor shall resubmit the bill to Project Manager, WAPCOS after compliance of observations and duly signed by the Project Manager of WAPCOS for further processing.

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 Engineer-in-Charge. The amount shall be paid by 45 working days after the day of presentation of the corrected bill by the Contractor to the Engineer-in-Charge or his representative, or 45 days after receive of the payments from Principal Employer whichever is later. As bidder/Contractor acknowledges that under the present Contract agreement, the Employer is only working as intermediary between Principal Employer and Contractor. Thus, the Contractor unconditionally acknowledge that the payments under the present Contract shall be made

proportionately by the Employer only on back-. to-back basis i.e., after 45 days subject to receipt of payment from Principal Employer. The Contractor also unconditionally agree that in the event the payment or part thereof, under the present Contract is not received from Principal Employer, then WAPCOS and/or any of its Employee/Officer shall not be responsible to pay any amount to Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the WAPCOS 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.

It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between Employer and the Contractor; the Contractor shall become entitled to payment only after Employer has received the corresponding payment(s) from the Principal Employer for the work done by the Contractor. Any delay in the release of payment by the Principal Employer to Employer leading to a delay in the release the corresponding payment by Employer to the Contractor shall not entitle the Contractor to any compensation/interest from Employer.

All payments shall be released by way of e-transfer through RTGS in India directly at their Bank account by Employer.

#### Clause 7A

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC / BOCW Welfare Board, whatever applicable are submitted by the Contractor to the Project Manager, WAPCOS.

# CLAUSE 8: COMPLETION CERTIFICATE AND COMPLETION PLANS

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge or his representative shall inspect the work with Project Manager, WAPCOS 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 he work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials,

rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

The completion certificate shall be issued by Employer to the Contractor after successful handing/taking over by Principal Employer; submitting of **Occupational Certificates** issued by the local urban bodies/Municipal Corporation by contractor along with submission of all necessary NOC's/statutory approvals from all concerned departments such as local urban bodies, Fire Department, Electricity Board/Chief Electrical Inspector, Forest, Lift etc. of that area in accordance with Government norms to enable Principal Employer/Owner to occupy the project with all required service. The Completion Certificate shall only be issued after the submission of "**No Claim Certificate**" by contractor as per the format given in the **Section of Annexures**.

# CLAUSE 8A : COMPLETION PLANS TO BE SUBMITTED BY THE CONTRACTOR

The contractor shall submit completion plans for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work, provided that the service plans having been issued for execution, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans. The "As Built" Drawings and completion report shall be submitted by the Contractor within 30 days from the date of completion works in 3 sets.

In case, the contractor fails to submit the completion plan/drawings as aforesaid, he shall be liable to pay a sum of 0.25% (zero point two five percent) of Tendered value.

#### CLAUSE 9 : PAYMENT OF FINAL BILL

The final bill shall be submitted by the Contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in- Charge whichever is earlier. No further claims shall be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished.

#### CLAUSE 10A: MATERIALS TO BE PROVIDED BY CONTRACTOR

The contractor shall, at his own expense, provide all materials, required for the works.

The contractor shall, at his own expense and without delay, supply to the Project Manager, WAPCOS 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 Project Manager, WAPCOS 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 Project Manager, WAPCOS 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/ Principal Employer shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or 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/ Principal Employer. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Project Manager, WAPCOS 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 Project Manager, WAPCOS and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in- Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge or his authorized representative 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 or his authorized representative shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge or his authorized representative may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

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

If the Engineer-in-Charge or his authorized representative instructs the Contractors to carry out a test not specified in the Specification to check whether any work has a Defect. Such tests are to be carried out by the Contractor by deploying agencies and paying all the cost for such tests.

# CLAUSE 10B :

# (i) SECURED ADVANCE ON NON-PERISHABLE MATERIALS AND RECOVERY

The contractor, on signing an indenture in the form to be 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 Project Manager, WAPCOS non-perishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on

the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this subclause are incorporated in the work, the amount of such advance shall be recovered/ deducted from the next payment made under any of the clause or clauses of this contract.

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

The secure Advance shall be recovered as per consumption of material from the contractor which secure advance is given to the contractor. If any value of secure advance is remaining to recover, then it will be fully recovered after completion of 80% work of the Tendered Value.

#### (ii) MOBILISATION ADVANCE

On request of contractor, the Employer shall make interest bearing advance payment for mobilization of labour, stores and workshops including camps, labour sheds, machineries and construction plant, etc. for preliminary and enabling Works, after the signing of Contract agreement to the extent of 10 (ten) per cent of the Tendered Value of an unconditional BG. Such BG shall remain effective until the advance payment has been fully repaid.

The aforesaid advance of 10 (ten) per cent shall be paid in two instalments, each of five per cent. The first one shall be paid on commencement of the work and on submission of unconditional BG in respect of the advance.

The second instalment shall be paid on certification by the engineer in charge for achieving a financial progress of 10 (ten) per cent of the Tendered Value, as also provision of a BG by the contractor for this part of the advance. Mobilisation expenditure mentioned herein shall not include the margin money and bank commission, and so on, paid by the contractor for procurement of BGs against performance security and mobilisation advance.

The request of contractor for aforesaid mobilization advance will be considered within 3 (three) months from the commencement of work.

#### (iii) INTEREST & RECOVERY OF MOBILISATION ADVANCE

The mobilization advance bears simple interest at the rate 10 % and shall be calculated from the date of payment to the date of recovery (365 days in a year) both days inclusive, on the outstanding amount of advance.

Before any installment of advance is released, the contractor shall execute a one single Bank Guarantee Bond from Scheduled Bank for the amount equal to 110% of the amount of mobilization advance and valid up to stipulated period of completion as mentioned in NIT. 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. Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first 10% 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 80% 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. Along with aforesaid condition of recovery of mobilization advance, if contractor wants to recover more or full mobilization advance from the interim bills, then accordingly mobilization advance may be recovered by Employer. The said request will be given by the contractor along with the interim bill to the Engineer-In-Charge. The Bank Guarantee will be returned after recovery of the mobilization advance against particular Bank guarantee.

# CLAUSE 10C : PAYMENT ON ACCOUNT OF INCREASE IN PRICE / WAGES DUE TO STATUTORY ORDER - NOT APPLICABLE

The Contractor shall treat all materials obtained during excavation of the site for a work, etc. as Government property and same shall be disposed-off according to the instructions in writing issued by the Engineer-in-Charge.

# CLAUSE 10CA : PAYMENT DUE TO VARIATION IN PRICES OF MATERIALS AFTER RECEIPT OF TENDER – NOT APPLICABLE

# CLAUSE 10CC: PAYMENT DUE TO INCREASE / DECREASE IN PRICES/ WAGES (EXCLUDING MATERIALS COVERED UNDER CLAUSE 10 CA) AFTER RECEIPT OF TENDER FOR WORKS – NOT APPLICABLE

# CLAUSE 10D : DISMANTLED MATERIAL PROPERTY

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as WAPCOS/Government/Principal Employer property and such materials shall be disposed off to the best advantage of WAPCOS according to the instructions in writing issued by the Engineer-in-Charge or his authorized representative.

# CLAUSE 11: WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS ETC.

The Contractor shall execute the work as per the sequence submitted by Contractor and approved by Engineer-in-Charge from time to time so that all other items of the work to be executed by other agencies are completed progressively along with the main work.

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 and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications or in any Bureau of Indian Standard or

any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

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

At least to 10% of prescribed Tests as per Central Public Works Department Manual/IS Codes of construction materials shall be carried out from the outside approved/NABL recognized Laboratory as may be approved by Engineer-In-Charge without any extra expenditure to Employer.

The Contractor shall establish a field test laboratory on the site with latest equipment's for carrying out field tests of construction materials and will maintain proper records of all the test results.

# CLAUSE 12 : DEVIATIONS / VARIATIONS EXTENT AND PRICING

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

- **12.1** The time for completion of the works shall, in the event of any deviations resulting in additional cost over the Tendered Value sum being ordered, be extended, if requested by the contractor, as follows:
  - (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original Tendered Value plus
  - (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

# 12.2 Deviations, Extra Items, Substituted item and Pricing

(a) 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, for the work and the Project Manager, WAPCOS 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 after approval of Engineer-in -charge.

- (b) 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.
  - 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).
  - 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).
- (c) In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Special Conditions of Contract, 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 Project Manager, WAPCOS 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 after approval of Engineer-in -charge.

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

**12.3** 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. Nothing extra shall be admissible for such operations.

# CLAUSE 13: FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK

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

The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned

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

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 WAPCOS 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 WAPCOS from the contractor under the terms of the contract.

In the event of action being taken under Clause 13 to reduce the scope of work, the Contractor may furnish fresh Performance Security on the same conditions, in the same manner and at the same rate for the balance tendered value and initially valid up to the extended date of completion or stipulated date of completion if no extension has been granted plus minimum 60 days beyond that. Wherever such a fresh Performance Security is furnished by the Contractor the Engineer-in-Charge may return the previous Performance Security.

# CLAUSE 14 : CARRYING OUT PART WORK AT RISK & COST OF CONTRACTOR

If contractor:

- 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
- (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

Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.

- (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to WAPCOS, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:
  - (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
  - (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

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

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 WAPCOS are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

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

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

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

# **CLAUSE 15 : SUSPENSION OF WORK**

(i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:

- (a) on account of any default on the part of the contractor or;
- (b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- (c) for safety of the works or part thereof.

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

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

#### CLAUSE 16 : ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Project Manager, WAPCOS and all the superior officers, officer of the Quality Assurance Unit of the WAPCOS or any organization engaged by the WAPCOS for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates incharge of the work or to the Engineer-in-charge of Quality Assurance or Project Manager, WAPCOS or his subordinate officers or the officers of the organization engaged by the WAPCOS 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.

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 Special Conditions of Contract may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

# CLAUSE 17: CONTRACTOR LIABLE FOR DAMAGES, DEFECTS DURING DEFECT LIABILITY PERIOD

The Warranty (on site)/Defect Liability Period shall be 12 (Twelve) Months.

The contractor will deploy sufficient manpower (i.e. Technical Supervisor, Mason, Electrician, Plumber etc.) and materials, accessories tools and plants required for the maintenance of the buildings, services, landscaping works, external development works during defect liability period. No extra charge in this account shall be paid to the contractor. Therefore, contractor is advised to quote the cost accordingly.

The Warranty/Defect Liability Period shall commence from the date of issue of the Taking Over Certificate by Principal Employer or issue of Completion Certificate by Principal Employer or agreed date of start of Defect Liability Period by the Principal Employer whichever is later. The Warranty period of equipments/items shall be provided as per the manufacturer norms or upto end of Defect liability period whichever is more. When the equipment is under Warranty/Defect Liability Period, it shall be the sole responsibility of the Contractor/Supplier to rectify defect of equipment, spare parts,

replacement equipment as deemed necessary by the Employer/Owner and install the same without any cost implications to Employer/ Owner.

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in- Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof.

Contractor shall take required works / rectification of defects immediately after receiving of complaints from Principal Employer / Employer. If Contractor fails to attend the complaints within the given time frame by Engineer-in-charge, then any expenditure incurred by WAPCOS in completing works / rectification of defects shall 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.

# CLAUSE 18: CONTRACTOR SUPPLY TOOLS & PLANTS ETC.

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

# CLAUSE 18A : RECOVERY OF COMPENSATION PAID TO WORKMEN

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

under this contract or otherwise. WAPCOS 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 WAPCOS full security for all costs for which WAPCOS might become liable in consequence of contesting such claim.

# CLAUSE 18B: ENSURING PAYMENT AND AMENITIES TO WORKERS, IF CONTRACTOR FAILS

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, WAPCOS is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, WAPCOS 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 WAPCOS under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, WAPCOS 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 WAPCOS to the contractor whether under this contract or otherwise WAPCOS 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 WAPCOS full security for all costs for which WAPCOS might become liable in contesting such claim.

# CLAUSE 19 : LABOUR LAWS TO BE COMPLIED BY CONTRACTOR

The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work.

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

The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

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

# CLAUSE 19A

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

# CLAUSE 19B : PAYMENT OF WAGES

- i. The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii. The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- iii. In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Contractor's Labour Regulations made by WAPCOS 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 WAPCOS against payments to be made under and for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- vii. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

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

#### CLAUSE 19C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.500/- 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 19 D

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

- (1) The number of labourers employed by him on the work,
- (2) Their working yours,
- (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.

Failing which the contractor shall be liable to pay to WAPCOS, a sum not exceeding Rs.500/- for each default or materially incorrect statement. The decision of the Engineer-In-Charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and be binding on the contractor.

# CLAUSE 19 E

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

#### CLAUSE 19 F

Leave and pay during leave shall be regulated as follows:-

- 1. Leave :
  - (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 :

- (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.
- (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.
- Conditions for the grant of Maternity Leave: 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.
- **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.

#### CLAUSE 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the WAPCOS, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and' Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.500/- 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.500/- 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.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the 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 workpeople on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

#### CLAUSE 19 H

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

- (i) (a) The minimum height of each hut at the eaves level shall be 2.10m (7 ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer.
  - (b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of  $1.80m \times 1.50m (6'x5')$  adjacent to the hut for each family.
  - (c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.
  - (d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
- (ii) (a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobri on both sides. The floor may be kutcha but plastered with mud gobri and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.
  - (b) The contractor(s) shall provide each hut with proper ventilation.
  - (c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
  - (d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed
- (iii) Water Supply The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/ their own cost make arrangements for laying pipe lines for water supply to his/ their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.
- (iv) The site selected for the camp shall be high ground, removed from jungle.
- (v) Disposal of Excreta The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta.

All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.

- (vi) **Drainage** The contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.
- (vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- (viii) **Sanitation -** The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.

#### CLAUSE 19 I

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

#### CLAUSE 19J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody 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 Contract Price of work may be imposed by the WAPCOS whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, Employer, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

# CLAUSE 19K : Employment of Skilled / Semi Skilled Workers

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

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

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

# CLAUSE 20 : MINIMUM WAGES ACT TO BE COMPLIED WITH

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

# CLAUSE 21 : WORK NOT TO BE SUBLET/ACTION IN CASE OF INSOLVENCY

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 WAPCOS 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 WAPCOS shall have power to adopt the course specified in Clause 3 hereof in the interest of WAPCOS 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 WAPCOS without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

# CLAUSE 23 : CHANGES IN FIRM'S CONSTITUTION TO BE INTIMATED

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an Proprietor Firm, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out

the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

# CLAUSE 24: LIFE CYCLE COST

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

# CLAUSE 25 : SETTLEMENT OF DISPUTES & ARBITRATION

# 25.1 Settlement of Disputes

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- 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 on 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 Engineer-in-Charge in writing for written instruction or decision. Thereupon, the Engineer-in-Charge shall give his written instructions or decision within a period of one month from the receipt of the Contractor's letter.
- II. In case the Contractor is not satisfied with the decision of Engineer-in-Charge, he may proceed for arbitration as detailed in Clause 25.2 hereinafter.
- III. It is a term of Contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.
- IV. Performance of this Agreement/ Contract shall continue during arbitration proceedings or any other dispute resolution mechanism pursuant to Clause 25.2. No payment due or payable by the Employer shall be withheld on account of pending reference to the arbitration or other dispute resolution mechanism excepts to the extent that such payment of dispute.

# 25.2 Arbitration

Any dispute, controversy of claims arising out of or relating to this Agreement or the breach, termination or invalidity thereof, shall be settled through following mechanism:

a. Firstly, the aggrieved party shall write a letter to the other party detailing its grievances and calling upon the other party to amicably resolve the dispute by convening a joint meeting.

Accordingly, the parties as per their convenience shall jointly convene the said meeting(s), wherein minutes of the said meeting(s) shall be prepared and countersigned by all the parties. It is mandatory to prepare minutes of meeting(s) and to be countersigned by all the parties, irrespective of the outcome of the said meeting(s).

- b. In the event the parties are unable to reach on any settlement in the said meeting(s), then the aggrieved party shall mandatorily resort to pre-litigation mediation mechanism with Delhi High Court Mediation Cell, New Delhi.
- c. It is only upon failure of the pre-litigation mediation mechanism with Delhi High Court Mediation Cell, then the aggrieved party shall resort to resolution of disputes through arbitration of a Sole Arbitrator. The appointing authority of Sole Arbitrator is CMD, WAPCOS Limited, to which neither of the parties have any objection nor they shall ever object.
- d. Subject to the parties agreeing otherwise, the Arbitration proceedings shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 (amended as on date).
- e. It is also acknowledged and accepted that the Employer is only working as intermediary between the Contractor/Supplier and the Principal Employer/Owner, thus in the event, any dispute arises under the present agreement and referred to Arbitration for adjudication, then subject to corresponding clause in the Contract between Principal Employer/Owner & the Employer, Principal Employer/Owner shall also be made party to the said Arbitration proceedings. Also, the award including costs if any passed against the Employer and costs incurred in the proceedings shall be the sole responsibility of Principal Employer/Owner. The said clause if found inapplicable, even then the other terms of the Arbitration Clause shall survive and shall be acted upon.
- f. The place/seat of arbitration shall be Delhi and any award whether interim or final, shall be made, and shall be deemed for all purposes between the parties to be made, in Delhi. The arbitral procedure shall be conducted in English language and any award or awards shall be rendered in English. The procedural law of the arbitration shall be Indian Law. The award of the arbitrator shall be final and conclusive and binding upon the Parties.
- g. The Contract and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of India and the Parties submit to sole & exclusive jurisdiction of courts at Delhi."

#### 25.3 English Language

The request for arbitration, the answer to the request, the terms of reference, any written submissions, any orders and awards shall be in English and, if oral hearings take place, English shall be the language to be used in the hearings.

#### 25.4 Performance during Arbitration

Pending the submission of and/or decision on a Dispute and until the arbitral award is published, the Parties shall continue to perform their respective obligations under the Contract without prejudice to a final adjustment in accordance with such award.

#### 25.5 No arbitration for decision on sub-standard work

The decision of Engineer-in-Charge regarding the quantum or reduction as well as justification thereof in respect of payment for sub-standard work which may be decided to be accepted will be final and would not be open to arbitration.

#### CLAUSE 26 : CONTRACTOR INDEMNIFY EMPLOYER AGAINST PATENT RIGHTS

The contractor shall fully indemnify and keep indemnified the Employer 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 Employer 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 Employer 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 : LUMPSUM PROVISIONS IN TENDER – NOT APPLICABLE

#### CLAUSE 28 : ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED

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

#### CLAUSE 29 : WITHOLDING AND LIEN IN RESPECT OF SUM DUE FROM CONTRACTOR

a) 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 WAPCOS 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 WAPCOS shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending 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 WAPCOS 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-inCharge of the WAPCOS or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or WAPCOS will be kept withheld or retained as such by the Engineer-in-Charge or WAPCOS 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 WAPCOS 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.

b) Employer 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 WAPCOS to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by WAPCOS to the contractor, without any interest thereon whatsoever.

Provided that the Government 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 WAPCOS on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by WAPCOS.

# CLAUSE 29A : LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

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 Employer or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Employer 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 Engineer-in-Charge or the Engineer-in-Charge or the Engineer-in-Charge 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 Employer or with such other person or persons.

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

# CLAUSE 30 : WATER FOR WORKS

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- (i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Project Manager, WAPCOS.
- (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The water charges @ 1 % on tendered value shall be recovered if water supplied by Government/ Principal Employer is used by contractor.

#### CLAUSE 30A : ALTERNATE WATER ARRANGEMENTS

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

#### CLAUSE 31 : HIRE OF PLANT & MACHINERY

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

#### CLAUSE 32 : EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work with full quality control. The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Even of the contractor (or partner(s) in case of firm/ company) is himself / herself an Engineers, it is necessary on the part of the contractor to Employ principal technical representative / technical representative (s).

The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge

to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in- Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

#### CLAUSE 33 : LEVY/TAXES PAYABLE BY CONTRACTOR

- (i) The Contract price is inclusive of Goods and Service Tax (GST) and any other taxes, levies, royalties together with all general risks, liabilities and obligations set out or implied in the Contract, applicable Labour Cess, cost of insurance to this Contract, all applicable tax liabilities, Income Tax & Surcharges, etc. However, only the payment of GST shall be reimbursed by the Employer to the Contractor.
- (ii) The Contractor shall issue E-Invoice (if applicable for contractor firm)/Tax Invoices to Employer showing (a) Basic Amount (b) GST amount separately for each bill. The payment of GST amount shall be reimbursed to the Contractor only after uploading of GST amount by Contractor on GST portal to avail input benefit of GST by Employer.
- (iii) Notwithstanding anything contained above, the Contractor shall ensure payment of appropriate tax on the supplies made under the Contract. The Contractor shall comply with all applicable provision of Goods and Service Tax (GST) levied by Union Government and State Governments. The Contractor shall get himself registered and discharge his obligations for payment of taxes, filing of returns etc. under the appropriate provisions of law in respect of all the taxes, duties, levies, cess, etc. The Employer would have right to seek necessary evidence that the Contractor is registered under the law and duly discharging its obligations under the tax law, enabling the Employer to avail input tax credit.
- (iv) In case any law requires the Employer to pay tax on the Contract price on reverse charge basis, the amount of tax deposited by Employer would be considered as paid to the Contractor and, accordingly, the price payable to the Contractor would stand reduced to that extent.
- (v) In case the Contractor does not deposit the tax payable on execution of the Contract, or has not provided the tax invoice to Employer showing the amount of tax, or has not uploaded the document in computerized tax network as per prevailing law, leading to non-availability of inputs credit of the tax to Employer, the amount equivalent to such tax shall be deducted from the any amount payable to Contractor.
- (vi) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Employer 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 Employer and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

# CLAUSE 34 : CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECEIPT OF TENDERS

All tendered cost shall be inclusive of all taxes and levies (except GST) payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the WAPCOS attributable to delay in execution of work within the control of the contractor.

Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess.

- (i) Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by WAPCOS for extension of time.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Government and/or the Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.
- (iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, or variation or repeal of such tax or levy or cess give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

# CLAUSE 35 : TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

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

# CLAUSE 36 : IF RELATIVE WORKING IN WAPCOS THEN THE CONTRACTOR NOT ALLOWED TO TENDER

The contractor shall not be permitted to tender for works in the WAPCOS responsible for award and execution of contracts in which his near relative is posted in WAPCOS. 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 Officer in the WAPCOS. Any breach of this condition by the contractor would render him liable to be debarred from tendering in WAPCOS any breach of this condition.

**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.

# CLAUSE 37: NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEAR OF RETIREMENT

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

# CLAUSE 38 : THEORETICAL CONSUMPTION OF MATERIAL- NOT APPLICABLE

# CLAUSE 39 : COMPENSATION DURING WARLIKE SITUATION

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 up to 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 the Engineer-in-Charge upto Rs. 2,00,000/- and by the next higher officer 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.

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. (Air Raid precaution) 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 Engineer-in-Charge.

# CLAUSE 40 : APPRENTICES ACT PROVISIONS TO BE COMPLIED WITH

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 WAPCOS may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

#### CLAUSE 41 : RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE

Release of Security Deposit of the work shall not be refunded if any complaint from labour / labour department against the contractor deployed at site for execution of works. 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.

#### CLAUSE42: INSURANCE

1. Requirements

Before commencing execution of works, it shall be obligatory for the contractor to obtain at his own cost stipulated insurance cover under the following requirements:

- a) Contractor's all risk and Third Party Cover.
- b) Liability under the workmen's compensation Act, 1923, Minimum Wages Act, 1948 and Contract Labour (Regulation and Abolition) Act, 1970.
- c) Accidents to staff, Engineers, Supervisors and others who are not governed by workmen's compensation Act.
- d) Damage to material, machinery and works due to fire theft etc.
- e) Any other risk to be covered by insurance as specified by the employer.

#### 2. Policy in Joint Names of Contractor and Employer

The policy referred above shall be obtained in the joint names of the contractor and the employer and shall inter-alia provide coverage against the following, arising out of or in connection with execution of works, their maintenance and performance of the contract.

- a) Loss of life or injury involving public, employee of the contractor, or that of employer and Engineer, labour etc.
- b) Injury, loss or damage to the works or property belonging to public, government bodies, local authorities, utility organizations, contractors, employer or others.

#### 3. Third Party Insurance

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of contract value from Nationalized insurance company for insurance against any damage, injury or loss which may occur to any person or property including that of Employer / Owner, arising out of the execution of the Works or Temporary works. Wherever required by Employer the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

Above policies shall remain in force throughout the period of execution of the works.

# CLAUSE 43 : PREFERENCE TO MAKE IN INDIA

The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017-Revision' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide letter no.-P45021/2/2017-PP (BE-II) as amended on 16.09.2020 shall be applicable to the bidding process and award of the contract shall be done accordingly.

Verification of Local Content

- i. The bidder at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement of the tender. They shall also give details of the location(s) at with the local value addition is made.
- ii. In cases of procurement for a value in excess of Rs 10 Crores, the bidder shall be required to provide a certificate from the 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.

#### CLAUSE- 44: RULE 144 (XI) IN GENERAL FINANCIAL RULES (GFRS) 2017

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. The bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a) An entity incorporated, established or registered in such a country; or
  - b) A subsidiary of an entity incorporated, established or registered in such a country; or
  - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d) An entity whose beneficial owner is situated in such a country; or
  - e) An Indian (or other) agent of such an entity; or
  - f) A natural person who is a citizen of such a country; or
  - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- iii. The beneficial owner for the purpose of clause above will be as under:
  - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercise control through other means.
  - 2. "Controlling ownership interest" means ownership of or entitlement to more than twentyfive per cent. Of shares or capital or profits of the company;
  - "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
  - 4. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  - 5. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone of together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profit of such association or body of individuals;
  - 6. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
  - 7. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
  - iv. An Agent is a person employed to do any act for another, or to represent another in dealings with third person. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

# **SECTION-V**

# SPECIAL CONDITIONS OF CONTRACT

# SECTION-V

# SPECIAL CONDITIONS OF CONTRACT

#### 1.0 SPECIAL CONDITIONS OF CONTRACT

The Special Condition of Contract (SCC) shall be followed by the Contractor in addition to the General Condition of Contract (GCC) of tender document. The following General Condition of Contract of this tender are modified/added as detailed below. In case of any discrepancy between GCC and SCC, the SCC will succeed over GCC.

GENERAL RULES AND DIRECTIONS under GCC				
DEFINITIONS				
2 (ix)	Market Rate Percentage on cost of materials and labour to cover all overheads and profits	15%		
2(x)	Schedule(s)	Delhi Schedule Rates- 2021 (CPWD DAR- 2021) for Civil works; DSR-2018 for E&M works		

GCC	Particular	Modified/ Added
Clause No.		
Clause 1	Performance Security	<ul> <li>a) Within 21 (Twenty one) days of receipt of the Letter of Award, but not later than the date of the signing of the Agreement, the successful bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Tendered Value: <ul> <li>a Bank Guarantee issued by a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) as per Annexure-I of Bid document; or</li> <li>a deposit receipt of a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) in favour of WAPCOS Limited payable at Delhi/ Gurgaon.</li> </ul> </li> <li>b) The confirmation of the Bank Guarantee shall be sought from the issuing bank through Structured Financial Messaging System (SFMS), from our banker Indian Overseas Bank, NHB, Gurugram, Branch Code: 1935, IFSC code: IOBA0001935 and Beneficiary as WAPCOS Limited. This shall also be applicable in respect of confirmation of any extension of the Bank Guarantee as and when required.</li> </ul>
Clause 10 B(iv)	Recovery of Mobilization	Applicable The mobilization advance shall be recovered @25% of the
	advance	value of work done (excluding GST) from each running

GCC	Particular	Modified/ Added			
Clause No.					
		account bill till complete mobilization advance is			
Clause	Devietiene /	recovered.			
Clause 12	Deviations / Variations Extent and Pricing				
	Clause 12.1	Not applicable			
	Clause 12.2(a)	Modified as:			
		<ul> <li>In the case of extra item(s) being Non Scheduled Item according to Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works, the contractor shall submit proper analysis on the basis of the market rates as per the direction of Engineer-in –charge and shall be paid in accordance with rate approved by WAPCOS plus applicable Goods and Service Tax (GST).</li> </ul>			
		<ul> <li>In case the extra item being the Scheduled Item according to [Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works], then rate of item shall be achieved by 89.29% (100/1.12 because 12% GST is already included in DSR) of schedule rate + increased / decreased in the rate as per the % quoted above or below by Contractor. The applicable GST will be paid over the achieved rate after approval of WAPCOS</li> </ul>			
	Clause 12.2(b)	Modified as:			
		<ul> <li>In the case of Substituted item(s) being Scheduled Item according to Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works), then rate of substituted item shall be achieved by 89.29% (100/1.12 because 12% GST is already included in DSR) of schedule rate + increased / decreased in the rate as per the % quoted above or below by Contractor. The applicable GST will be paid over the achieved rate after approval of WAPCOS.</li> </ul>			
		<ul> <li>In the case of Subsituted item(s) being Non Scheduled Item according to Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works, the contractor shall submit proper analysis on</li> </ul>			

GCC Particular Clause No.		Modified/ Added				
		the basis of the market rates after direction engineer- in-charge / WAPCOS.				
	Clause 12.2(c) Deviation Limit for	100%				
	all items of work	<ul> <li>Modified as "In the case of deviated item(s) being Non Scheduled Item according to Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works,. The contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis on the basis of the market rates. Contractor shall be paid in accordance with rate approved by WAPCOS plus applicable Goods and</li> </ul>				
		<ul> <li>Service Tax (GST) on work contract.</li> <li>In the case of deviated item(s) being Scheduled Item according to Delhi Schedule Rates- 2021 (CPWD DAR-2021) for Civil &amp; Fire Fighting works; DSR-2018 for E&amp;M and DSR- 2020 for Horticulture &amp; Landscaping works), then rate of deviated item shall be achieved by 89.29% (100/1.12 because 12% GST is already included in DSR) of schedule rate + increased / decreased in the rate as per the % quoted above or below by Contractor. The applicable GST will be paid over the achieved rate after approval of WAPCOS.</li> </ul>				

# 2.0 ADDITIONAL CONDITIONS OF CONTRACT

# 2.1 Inspection of the work by any Government Agency

The Contractor shall be responsible for consequential effects arising out during the inspection done by the Chief Technical Examiner Cell, Central Vigilance Commission or Committee constituted by the Principal Employer or construction site visiting team of Principal Employer or by the Building Works Committee or third party authorized by WAPCOS or any Statuary Committee or by any duly authorized representative of WAPCOS, during the progress or any time after the construction and development of project up to the defect liability period, and will take appropriate action for rectification of defective work and modifications as suggested by the above teams/ group/ individual. Rectification of defective works or replacement of substandard materials or articles or modifications, as pointed out by the Chief Technical Cell, Central Vigilance Commission, committee constituted by Principal Employer, construction site visiting team of Principal Employer, Building Works Committee or authorized representative of WAPCOS or third party authorized by Employer/Principal Employer or any Statuary Committee, will be carried out or replaced/ modified by the Contractor at his own risk and cost.

# 2.2 Prior Approval from Fire Department & Electrical Department

Contractor shall take prior approval well in advance of electrical substation, layout, drawings, electrical equipment, solar installation drawings/documents etc. from concern Electrical Department/ local Authorities before order of procurement & commencing the Electric work. Contractor shall take prior NOC from Local Fire Department & submit the project drawings to the Fire Department before commencing the construction works for checking and verification of fire department as per the fire norms of that particular region. After the completion of work, Contractor shall apply and provide final fire department NOC.

#### 2.3 Site Facilities

 The contractor shall provide fully equipped office for Engineer- in-charge/ site engineer/ Principal Employer along with facility of 24 hours electric and drinking water supply, sanitary facilities, one inspection vehicle, furniture and desktop computers of latest version along with printers and internet connection at construction site and any other miscellaneous requirement as directed by Engineer-in-charge for finalizing immediate technical solutions/decisions on the site, so that the work progress may not be hampered. Additionally, an amount equal to X% (As detailed below in table) of the gross amount from all the running account bills and final bill will be recovered / deducted.

Sr. No.	Project Cost	Percentage Deduction from RA Bills & Final Bills (X %)
1.	Upto 5 Crores	2%
2.	Between 5 Crores to 100 Crores	1%
3.	Above 100 Crores	0.5%

- The Contractor shall provide at his own cost, One Site sign Board, at directed location of overall size 2.40 metres wide and 1.50 metres height and of approved design. The names of the Project, Employer, Consultants, Engineer and Contractor etc. shall be exhibited as directed
- The Contractor has to make own security arrangement. Contractor shall maintain upto date record of in & out of the material & labour / staff at the security gate of campus at its own expenses.
- The Contractor shall provide safety equipment to the Employers/officers (whenever required).
- Contractor shall deploy security/ watchmen for 24 hours on site at entire execution period and up to successful handing over of the project to the Principal Employer.
- Contractor shall properly cover up & protect all the work throughout the duration of work at his cost until successful handing over to the Principal Employer, particularly flooring, risers, mouldings, steps, terrace or special floor finishes (by a layer of 25 mm thick Plaster of Paris over Polyethylene sheet as approved by Engineer-in-Charge) staircases and balustrades, doors and glass, paint work, furniture and all finishing

# 2.4 Approach Roads and Transportation of Equipment & Materials

Contractor will be permitted to use the existing roads in the establishment area for the purpose of transporting equipment and materials and for use of labour etc if Principal Employer permits the same. The Engineer-in-Charge, however, will not undertake to provide any approach roads to the actual site of work. It shall be the entire responsibility

of the Contractor to provide and maintain such temporary approach roads including cross drainage works if any at his own cost for the purpose of movement of men, materials and equipment.

#### 2.5 Supply of Water for Construction Purpose

Contractor shall make his own arrangement of water required for the work, at his own cost, subject to the approval of the Engineer-in-Charge. However, the Contractor will be permitted to drill bore well/s at site and the Contractor shall pay all charges to local bodies / authorities / royalty if any and obtain statutory approvals, geological survey provide pump, pipeline, casing with all accessories required for functioning of the bore well. The water should be tested in an approved laboratory and should be permitted to use in work if found suitable for construction. However, Contractor shall make alternate arrangements in case the water is not found fit for construction. After completion of work the Contractor will handover complete bore well/s with pump/s and accessories to the Employer at no cost. The water storage tanks should be leak proof and wastage and misuse of water is strictly prohibited, Contamination and pollution of water to be strictly avoided. Construction water should not be used for drinking or for domestic purpose.

#### 2.6 Monthly Bill of Electric & Water Department

The Contractor shall make his own arrangement for the Temporary connection for Supply of Electricity & Water for Construction Purpose as required at his own cost and pay their monthly bill. After getting permanent connection during final stage of construction for Principal Employer/ Project, contractor shall pay monthly billing charges of Permanent electric and water connection (taken by contractor on behalf of Principal Employer, to run project) up to the successful handing over of the project to Principal Employer, from the date of installation of connections. These charges will be borne by the contractor. Hence contractor shall quote the cost in tender accordingly

#### 2.7 Handing Over of the Project

Contractor shall apply/ laison, well before the completion of project, for permanent electricity connection, Electric load enhancement, solar net metering from concerned Electrical Departments for Permanent supply of electricity to the project within the completion period of the project. After completion of installation of electric equipments & connections, Contractor shall arrange necessary testing of equipment, panels, transformer, DG set, solar installation etc. at site as per norms and provide test reports to Employer/local Authorities. After that Contractor will arrange all necessary approval/NOC from Chief Electrical Inspector Department/ local Authorities etc. to submit further to the electricity department for getting permanent electrical supply to the project.

Contractor shall apply/ laison, well before the completion of project, permanent water connection & Sewerage Connection, gas connection, etc. from concerned Departments/ Government Authorities which are mandatory to make the project operational and get the connection within the completion period of the project.

Contractor shall provide necessary Statutory Approvals/NOCs/ License from all local Government/ Statuary Authorities including Fire, Forest, Electrical, Pollution, Environment, Lift, DG Set, final Occupancy Certificate required before handing over the project to the Principal Employer.

Contractor will hand over the project to Employer/Principal Employer after successful completion of each component of the project along with submission of all the required documents i.e. As- built drawings, Inventory list, guarantee / warranty bonds, certificates & invoices of equipment, lock and key of each room, NoCs form various Departments and final Occupancy Certificate from Local Body with complete satisfaction and acceptance by Principal Employer within the completion period of the project.

The statutory fees, if any will be deposited by the contractor for the above will be reimbursable to the contractor by Employer after providing the original receipt of the concern department. No other amount will be paid to the contractor for above works.

The partial handing over of works components shall not be considered. The Warranty/Defect Liability Period shall commence from the date of issue of the Taking Over Certificate by Principal Employer or issue of Completion Certificate by Principal Employer or agreed date of start of Defect Liability Period by the Principal Employer whichever is later along with submission of all the required documents i.e. As- built drawings, Inventory list, guarantee / warranty bonds, certificates & invoices of equipment, lock and key of each room and NoCs form various Departments.

#### 2.8 Ceremony/Inaugural Function

The contractor shall make all arrangements for Foundation Stone/ Ground Breaking Ceremony/Inaugural Function etc. for the project as required and the cost towards it deemed to be included in quoted cost by the contractor. Any expenditure already incurred/to be incurred by Employer on account of ground breaking ceremony/inaugural function etc, shall be recovered from the Contractor.

#### 2.9 Setting out Base Lines and Levels

The Contractor shall establish at site the layout of each component of the work from base lines and grids established by the Employer and shall be responsible for all measurements in connection therewith. The Contractor shall, at his own expenses, furnish all stakes, templates, platform, equipment, ranges and labour that may be required in setting out or laying out any part of the work. The Contractor shall be held responsible for the proper execution of the work to such lines, levels and grids as may be established or indicated on the drawings and specifications. The Contractor shall check the bench marks and stakes existing at the site for laying out lines and levels.

The Contractor has to construct and maintain proper bench marks at all salient locations/positions in order that the lines and levels may be accurately checked at all times. Theodolite/ Total Station, Levels, Prismatic Compass, Chain, Steel and FRP Tapes and all other surveying instruments found necessary on the works shall be provided by the Contractor for use at site in connection with this work.

#### 2.10 Co-operation & Co-ordination with other Agencies:

The Contractor shall have to make Coordination with other agencies engaged at the site by the Employer at no extra cost and share the Site with other Contractors/agencies, public authorities, utilities working in the area, if any. The Contractor will carry out the entire work in a planned manner by coordinating his work with other agencies, who will be simultaneously carrying out work in the same area and also co-ordinate in connection with the position of various fixtures, inserts, embedment's and other allied work connected with the completion of the building / subject work.

In case of any dispute between the agencies engaged on the same work, decision of Engineer-in-Charge shall be final and binding.

#### 2.11 Operations and Storage Areas

All operations of the Contractor shall be confined to areas authorized by the Project Manager, WAPCOS and storage of materials shall be over the areas specially indicated by the Project Manager, WAPCOS. Materials like sand and metal of different sizes shall be stored in properly constructed bins with hard floor to avoid inter mixing as well as mixing with objectionable materials. The Contractor shall be obliged to keep the premises in hygienic conditions by proper drainages of the area provided with suitable approaches throughout the period of Contract. He shall rectify all damages caused to the Government property within the areas thus allotted. He shall be responsible to clear all rank, vegetation at site at his own cost.

#### 2.12 Contractor's Storage and Site Office

The Contractor shall make own arrangement for storing his equipment, plant, materials etc. and for his site office and cement godown. The Contractor be solely responsible for watching or guarding his property and materials. Contractor shall cover all materials at site with requisite insurance against theft, larceny, dacoits, fire tempest and flood. The Contractor, however, shall have to dismantle the shed and vacate the land after the receipt of due notice from the Project Manager, WAPCOS if the same is obstructing any work. The Contractor should obtain necessary permission / approval from Statutory Authorities such as Municipal corporations / Local bodies etc. for construction of temporary structures at site of work such as cement godown, stores, site office etc. It will be responsibility of the Contractor to prepare proper plans, to pay any requisite fees to statutory authorities and to execute the work for the temporary structure at their own cost as per the conditions and rules laid by statutory authorities.

The Engineer-in-Charge or his authorized representative shall have a right at any time to inspect and examine any stores and materials intended to be used in or on the works either on the site or at any factory or workshops or other places where such stores or materials are being constructed or manufactured or processed or any place from where they are being obtained and the Contractor shall give such facilities as required to be given for such inspection and examination.

The Engineer-in-Charge or his authorized representative shall be entitled to have tests made without any extra cost to the Employer at the laboratory selected by the Employer for any stores and or materials supplied by the Contractors, who shall provide at his own expense all the facilities which the Engineer-in-Charge may require for this purpose.

Any stores and materials brought to site for use on the work and which has been rejected by Engineer-in-Charge shall be immediately removed off the site by Contractor at his own expenses and intimate in writing accordingly to the Engineer-in-Charge. The rejected materials shall not be used in any manner in the construction of the project.

#### 2.13 Temporary Buildings

Any temporarily buildings and office facilities as required by the Contractor shall be arranged by the Contractor at his own expense. Area for the same will be made available by the Employer, if available. After the work is over, all these temporary facilities shall be removed by the Contractor at his own expense within 10 days from the date of completion.

Labour Camp is permitted at site after approval of Principal Employer. However, no labour shall be permitted to stay in the partly completed building at any time. Unauthorized

occupation of any area/partly completed building by the Contractor's labourer will be treated as trespass and action will be taken to evict them including termination of Contract if deemed fit. Sanitary as well as water supply and drainage facilities as required by the labour laws in force, are to be provided by the Contractors at his own cost. The labour camp should be dismantled by the Contractor before handing over the buildings.

#### 2.14 Traffic Interference & Inconvenience to the Public

The Contractor shall so conduct his operations as to interfere as little as possible with the traffic/public. When interference to traffic is inevitable, a notice of such interference shall be given to the Project Manager, WAPCOS well in advance (at least 2 days) at any stage, if it becomes necessary to divert the traffic, the Contractor shall obtain permission from the local traffic authorities at his own expense. The Employer will render reasonable assistance in the matter. The Contractor shall take all precautionary and other measure, such as providing warning signals, temporary diversion etc. all as directed by the Project Manager, WAPCOS. The Contractor shall not deposit materials anywhere at work site which will seriously inconvenience the public. The Project Manager, WAPCOS may require the Contractor to remove any materials which are considered to be a danger or inconvenience to the public or cause them to be removed at the Contractor's cost.

The Contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation to the existing water supply and power lines. The cost of any such damage and risks arising out of this shall be entirely borne by the Contractor.

#### 2.15 Drainage around the Buildings and Foundation for other Works

The Contractor shall be entirely responsible for the provision and maintenance of efficient drainage arrangements in the work site to lead all water whatsoever pumped out from the excavations on account of rains, floods, springs or any other source whatsoever. The foundation trenches shall be kept free from water while all the works below ground level are in progress.

Flooding or ponding of water in the work site shall not be permitted under any circumstances whatsoever and the Contractor shall take all necessary precautions to prevent the same by providing suitable pumps and other dewatering arrangement.

The cost of repairing damages if any, to the work under execution or to any government property in and around the site shall be entirely borne by the Contractor where such damages are due to his non-compliance with the above conditions.

#### 2.16 Maintenance of Entire Electrical Installation

As mentioned above, the Contractor shall maintain his entire electrical installation, appliances etc. in good and safe condition as required under relevant rules and BIS codes of practice etc. till completion of works at his own cost. However, the following precautions and directives shall be followed in addition to observing other essential rules:

- a. The minimum clearance (measured at the lowest sag point) to be maintained for all overhead lines shall be 4 Mtrs. cross country or along roads and 6.1 metres across roads.
- b. Metallic poles as a general rule should be avoided and if used should be earthed individually.
- c. All loose hanging of wires and cables should be avoided. The line wires should be properly supported and an approved method of fixing shall be adopted.
- d. Installation shall not cause any hindrance to the normal movement of men and materials at site.

- e. All cables and wires should be adequately protected against mechanical damage during construction activity of all Contractors, working at site.
- f. In case the cable is required to be laid in ground, it should be adequately protected by covering the same with bricks, R.C.C. tiles or any other approved means and cable markers provided at suitable intervals as per approval of the Engineer-in-Charge.
- g. Laying of cable and wires direct on floor shall not be allowed but if absolutely necessary for some very short lengths, the same shall be taken through suitable mechanical covering like G.I. / M.S. Pipes etc.
- h. All the cut door switch boards, equipment etc., should be adequately protected against rain or preferably they should not be exposed to weather.
- i. If overhead lines using bare conductors are installed, a guard wire system of adequate size shall run along the cables / wires and earthed effectively.
- j. The connection for portable machines shall be taken only through suitably rated 3 pin socket points. Iron clad industrial type outlets are preferred. While taking supply through socket outlet a plug top must be used, avoiding inserting of loose wires in the sockets. The third pin of the plug shall invariably be earthed and 3 core wire of appropriate specifications and capacity shall be used.
- k. All three- p h a s e equipment shall be provided with duplicate earthing. All metallicframes, light fixtures, portable equipment's etc. should be effectively earthed to main earthing.
- I. Duly authorized persons having valid wireman's license / competence certificate must be employed under the supervision of a qualified and experienced Electrical Supervisor for carrying out electrical work and repair of electrical equipment, installation and maintenance etc. at site.
- m. Special precaution shall be taken by the Contractor not to disturb the sapling/trees recently planted by the side of the compound wall. The sapling/trees fall within the building/road etc. shall be transplanted to suitable place with written approval of the Engineer-in-Charge and maintained by the Contractor till completion of works at his own cost.

# 2.17 Proper drawings and instructions

The Contractor shall provide shop drawings and other drawings to the Engineer-in-Charge in line with the requirement of contract agreement from time to time for approval for the purpose of proper and adequate execution and maintenance of the work and the Contractor shall carry out the work and be bound by the same.

Copies of the drawings approved by the Engineer-in-Charge and the construction drawings issued shall be kept by the Contractor at the site and the same shall at all reasonable times be made available for inspection and use by the Engineer-in-Charge and any other person authorized by the Engineer-in-Charge.

# 2.18 Employment of Staff for Plumbing & Electrical Works

- Employment of certified plumber: Certified plumbers should be employed by the Contractor on the work for main sewer, filtered and unfiltered main.
- Employment of licensed electrical foreman: The Contractor should employ a licensed electrical foreman to supervise the Electrical works.

# 2.19 Urgent repairs

If by reason of any accident or failure or other event occurring to or in connection with the work or any part thereof either during the period of construction or maintenance, any remedial

or other work or repair shall in the opinion of the Project Manager, WAPCOS be urgently necessary for security etc. and the Contractor is unable or unwilling, at once, to do such work or repair, the Project Manager, WAPCOS may be his own or other workmen do such work or repair as he may consider necessary. If the work or repair so done which in the opinion of the Project Manager, WAPCOS, the Contractor was liable to do at his own expenses under the Contract and all cost and charges properly incurred by the Project Manager, WAPCOS in so doing shall on demand be paid by the Contractor or may be deducted from any sum due or which may become due to the Contractor provided always that the Project Manager, WAPCOS shall soon after the occurrence of any such emergency as may be reasonable, practicable, notify the Contractor thereof in writing.

#### 2.20 Security Regulations

The Contractor has to strictly follow the security regulations at the work site regarding entry of personnel, material etc. and any other regulation that might be enforced from time to time. All materials and articles brought by the Contractor to the work site shall have to be declared at the security gate. Similarly, no materials shall be taken out from the premises without proper gate pass.

The Contractors, Suppliers, vendors, workers engaged in work/business will be issued with renewable entry permit to avoid unauthorized entry in the work site on scrutiny of applications in prescribed form.

For working on Sundays, Holidays and late hours, even though permission will be accorded by the Engineer-in-Charge, the Contractor will have to make application to the Engineer-in-Charge also and keep them informed well in advance.

The area where the proposed work is to be carried is residential / non-residential area under the control of Security authorities, entry to the site of work shall be through the main gate only. The Contractor shall follow strictly the security regulations at site of work regarding entry of personnel, materials etc. and other regulations that might be enforced from time to time at the work site and also in the campus for smooth and efficient operation. The Contractors, his agents, representatives, workmen etc. and his materials, carts, trucks or other means of transport etc. will be allowed to enter through and leave from such point of entry/exit at such times, the authorities in charge of the area, at their sole discretion, may permit.

The Contractors, his agents and representatives are required to be in possession of the individual identity / muster cards or passes. The muster cards or passes are examined by the security staff at the time entry / exit inside the premises and also at any time or number of times within such area.

The Contractor will have to apply for entry/muster permits of likely number of labour to be engaged during the week for the workers and authorize their representatives to collect the entry permits for labour from the Employer's Security Authorities.

It will be the responsibility of the Contractor to maintain the list of laborers permitted to work inside the premises in a register and the representative of Contractor's labour will have to issue entry pass to each labour after making necessary entry in the registers.

The Contractor, his agents, representatives, workmen shall strictly observe the orders pertaining to prevailing fire precautions.

In addition to the above, other security regulations as may be imposed by the Security authorities / Project Manager, WAPCOS shall be complied with / observed by the Contractor and his workmen, in addition to the above.

Any breach of above security regulations and rules in force from time to time will be viewed seriously. No claim whatsoever will be entertained by the Employer on account of the observation of the Security regulations.

#### 2.21 Watch and Ward and Lighting

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or as required by the Project Manager, WAPCOS and duly constituted authority for the protection of the workers or for safety and convenience of the public or others. The Contractor shall be responsible for all damages and accidents caused due to negligence in this regard.

It will be the entire responsibility of the Contractor to protect the work(s) carried out by them including the fittings, fixtures and other accessories provided by them till the entire work is satisfactorily handed over to the Employer.

#### 2.22 Removal of rejected/sub-standard materials.

The following procedure shall be followed for the removal of rejected/sub-standard materials from the site of work:

- (i) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the Site Order Book under the signature of the Project Manager, WAPCOS, giving the approximate quantity of such materials.
- (ii) As soon as the material is removed, a certificate to that effect shall be recorded by the Project Manager, WAPCOS against the original entry, giving, the date of removal and mode of removal, i.e., whether by truck, carts, or by manual labour. If the removal is by truck, the registration number of the truck should be recorded.
- (iii) When it is not possible for the Project Manager, WAPCOS to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site, the required certificate should be recorded by the Authorized Representative of WAPCOS, and the Project Manager, WAPCOS should countersign the certificate recorded by the Authorized Representative.

# 2.23 Special Conditions for Steel:

The contractor shall procure TMT bars of Fe500/Fe500D/Fe550/Fe550D grade (the grade to procured is to be specified) from primary steel producers as per the list of approved makes or any other producer as approved by WAPCOS who are using iron ore as the basic raw material / input and having crude steel capacity of 2.0 Million tonnes per annum and above

# 2.24 Special conditions for Cement

The contractor shall procure 43 grade Ordinary Portland Cement (conforming to IS : 8112), Portland pozzolona cement (confirming to IS : 1489 : Part –I) as required in the work, from reputed manufacturers of cement as per the list of approved makes or from any other reputed cement manufacturer, having a production capacity not less than one million tones per annum

as approved by WAPCOS. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacture(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufactures, given by the tenderer, fully or partially. The cement brought to the site for execution of work shall be in bags bearing manufacturer's name & ISI marking. Weight of cement in each bag shall be 50 kg. Samples of cement arranged by the contactor shall be taken by the Engineer- in-Charge and got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and it shall be removed from the site by the contractor at his own cost within 7 days of written order from the Engineer-in-Charge to do so.

#### 2.25 Special Conditions for Waterproofing and Testing

The contractor shall associate himself with the specialized firm, to be approved by the Engineer-in-Charge in writing, for water proofing treatment as contractor shall provide Guarantee Bond in the prescribed format for 10 years. After laying and jointing of pipes for PHE works contractor shall carry out Pressure test as per CPWD Specification 2019 to check the leakage and sustainability of whole pipe network system. Similarly after water proofing works and finalization of roof top surface/exposed surfaces, the entire surface thus treated shall be flooded with water by making kiaries with weak cement mortar, for a minimum period of two weeks.

#### 2.26 Other Conditions

- a) Contractor shall use good quality Steel Props and steel shuttering material for RCC works. Use of wooden props and shuttering is affecting the line, level and alignment of RCC members. No payment shall be released for RCC work where use of wooden centering & shuttering material is noticed or reported.
- b) All mass Reinforced Cement Concrete work shall be design mix concrete of specified grade and initial design mix shall be carried out from the NIT/IIT only immediately after award of work. The Design Mix report shall be submitted to WAPCOS before commencement of the RCC works at site.
- c) The Contractor shall be responsible to co-ordinate with service provider/concerned authorities for cutting of trees, shifting of utilities and removal of encroachments etc. and making the site un-encumbered from the project construction area required for completion of work. This shall include initial and frequent follow up meetings/ actions/ discussions with each involved service provider/ concerned authorities. The contractor shall not be entitled for any additional compensation for delay in cutting of trees, shifting of utilities and removal of encroachments by the service provider/ concerned authorities.
- d) Contractor shall provide R.O. Plant sufficient for workers employed at site, his technical staff and site staff.
- e) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been in-built in the items and nothing extra shall be payable (or) extra cement considered in consumption on this account.
- f) No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The Contractor shall be fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he shall make good the

same at his risk and cost. The Contractor shall be fully responsible for safety and security of his material, T&P, Machinery brought to the site by him.

- g) Wherever work is specified to be done or material procured through specialized agencies, their names shall be got approved well in advance from Engineer-in-Charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work, Contractor should negotiate with concerned specialist agencies and send their names for approval to Engineer-in-Charge. Any material procured without prior approval of Engineer-in-Charge in writing is liable to be rejected. Engineer-in-Charge reserves right to get the materials tested in laboratories of his choice before final acceptance. Nonstandard materials shall not be accepted.
- h) The construction joints shall be provided in predetermined locations & as per the approved drawings only.
- i) The Contractor shall invariably prepare the samples of finishing items i.e. flooring of different types, external & internal finishing i/c colour scheme of paint, tiles in dado, flooring in platforms & staircase, water supply & sanitary fittings and any other item as per direction of Project Manager, WAPCOS. The Contractor shall proceed with further finishing items only after getting the samples of these items approved in writing from Engineer-in-Charge. No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the Contractor on this account.
- j) Contractor shall not divert any advance payments or part thereof for any work other than that needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e., mobilization advance, secured advance against materials brought at site, secured advance against plant & machinery and/or for work done during interim stages, etc.) are required to be re-invested in the contracted work to ensure advance availability of resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
- k) Any Circular/Guidelines/SOP issued by the Principal Employer/ Government during the progress/ execution of the construction work shall be followed by the contractor without any dispute. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charges which he may be liable.
- All the modifications and any additional works (basic requirement after use of premises by user) suggested by Principal Employer at the time of handing over of the project and after occupancy of premises by Principal Employer during Defect Liability Period must be taken up by contractor without any disputes.
- m) If any dispute/ hindrance may arise during construction due to any reason whatsoever, the contractor is not liable for any financial claim or damages due to such circumstances.
- n) If the work is carried out in more than one shift or during night, no claim on this account shall be entertained. The contractor has to take permission from the police & local authorities etc. if required for work during night hours. No claim / hindrance on this account shall be considered if work is not allowed during night time. The requisite supervision shall be made available by the WAPCOS along with necessary issue of material under joint custody.
- o) In case of any inconsistency between clauses, the clause favorable/ beneficiary to the project will prevail which will be decided by the Principal Employer and Employer.
- p) One sample room complete in all shape for each category, shall be prepared by the

contractor and got approved from Engineer-in-charge in writing. The contractor shall be allowed to proceed with further rooms only after getting the sample room approved in writing from Engineer-in-charge No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the contractor on this account.

- q) It must be ensure that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should confirm to CPWD specification and relevant BIS codes. In such case written approval of the Engineer-In-Charge may be obtained before use of such material in the work.
- r) In case of works where a ready mix concrete (RMC) is stipulated to be used from an approved source/manufacturer, cement register need not be maintained. However, the computerized dispatch slips that are sent with each dispatch of RMC shall be kept as record.

# **SECTION – VI**

# ANNEXURES

ANNEXURE - I	FORMAT FOR CONTRACT AGREEMENT AND LETTER OF AWARD
ANNEXURE - II	FORMAT FOR PERFORMANCE BANK GUARANTEE
ANNEXURE - III	FORMAT FOR MOBILIZATION ADVANCE PAYMENT BANK
	GUARANTEE
ANNEXURE - IV	FORMAT FOR INDENTURE FOR SECURED ADVANCES
ANNEXURE - V	FORMAT OF BANK GUARANTEE FOR EMD
ANNEXURE - VI	FORMAT FOR SEEKING EXTENSION OF TIME
ANNEXURE – VII	FORMAT OF GUARANTEE BOND /AFFIDAVIT FOR WORKS
ANNEXURE - VIII	CONTRACT FOR REMOVAL OF DEFECTS AFTER COMPLETION IN
	RESPECT OF WATER PROOFING WORKS
ANNEXURE – IX	FORMAT FOR GUARANTE BONDS FOR ANTI-TERMITE
	TREATMENT
ANNEXURE – X	SAFETY CODES
ANNEXURE – XI	MODEL RULES FOR THE PROTECTION OF HEALTH AND
	SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY
	CONTRACTORS
ANNEXURE – XII	CONTRACTOR'S LABOUR REGULATIONS
ANNEXURE - XIII	NO CLAIM CERTIFICATE

## ANNEXURE-I

# (Format for "Contract" to be signed on Non-Judicial Stamp Paper of Rs. 100 by successful bidder)

#### CONTRACT AGREEMENT

This Contract made on the \_\_\_\_\_ day of \_\_\_\_ 20\_\_\_\_ between WAPCOS Limited, a Company in corporate under Indian Company's Act and having its registered office at 5<sup>th</sup> floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called "WAPCOS" of the one part) and (Name of Contractor Firm & Address)\_\_\_\_\_\_ (hereinafter called "Contractor" of the other part).

" WHEREAS the WAPCOS is desirous that Work known as " (Herein after referred to as "Work/ Project") under Tender the dated \_\_\_\_\_\_ should be executed by the no. Contractor AND WHEREAS by a Letter of Award No. dated issued by WAPCOS Limited and accepted by the contractor. WAPCOS Limited has accepted a Bid submitted by the Contractor for the execution and completion of such Work AND WHEREAS the Contractor has agreed undertake such Work and furnish a Performance to Security (details) pursuant to Tender conditions.

NOW THIS AGREEMENT WITNESSETH as follows;

In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

The following documents shall be deemed to form and be read and construed as part of this Contract, viz;

- a) Tender Document no.\_\_\_\_\_dtd.\_\_\_\_
- b) Letter of Award to Contractor by WAPCOS
- c) Documents furnished by the Contractor during Bidding process
- d) Corrigendum/Amendments, if any
- e) Clarifications / Correspondences, if any
- f) Any other documents as forming part of the contract
- 1. The aforesaid documents shall be taken as complementary and mutually explanatory of one another.
- 2. In consideration of the payment to be made by WAPCOS to the Contractor as indicated in this Contract, the Contractor hereby covenants with WAPCOS to execute and complete the Works in conformity, in all respects, with the provisions of the Contract.
- 3. WAPCOS hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the contract at the time and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with Laws of India on the day, month & year indicated above.

#### SIGNED, SEALED AND DELIVERED

For and on behalf of the WAPCOS

For and on behalf of the Contractor

NAME Designation	NAME Designation			
in the presence of witness:	in the presence of Witness			
1	1			
2	2			

NOTE: Contractor shall submit the Original Power of Attorney on Non-Judicial Stamp Paper for this particular Work / Project, in the name of Person who will sign the Contract with WAPCOS after award of Work.

# FORMAT FOR LETTER OF AWARD

No	Date:
M/s(Name of successful bidder)	
(Address of successful bidder	)
Subject: Award Letter for	
Reference: Tender No.	

Dear Sir,

We are pleased to inform that work of "....." is awarded to your firm at a cost of Rs. ------ excluding GST, according to submission of your technical & financial bid against referred tender for the subjected work.

Project	Awarded Cost (Excluding GST)
Repair and Maintenance Works of Various Buildings	Rs
at Assam University	

- 1. The "Date of Commencement of Work" shall be 15 days after Date of Award or Handing over of Site whichever is later and accordingly, planning should be started for deploying manpower, resources as per Terms & Conditions of Tender document.
- 2. The tender document wholly accepted by you along with all related correspondences at the time of bidding shall form a part of this letter of award.
- 3. You are requested to submit the following as per Terms & Conditions of tender
  - Performance Security @5% of Tendered Value as per the form enclosed in the tender document before signing of the Agreement within 21 (Twenty One) days of the date of acceptance of the letter of award and sign the Contract Agreement.
  - Detailed Schedule Plan/ Bar chart of each component of work to complete the work in stipulated time period.
  - Labour License from concerned Labour Department of State
  - Contractor All Risk (CAR) and Third Party Cover Policy.
  - Liability under the workmen's compensation Act, 1923, Minimum Wages Act, 1948
  - Details of manpower to be deployed at site along with CVs
  - List of Lab Equipment required for the work for approval of Engineer-in charge.
- 4. The terms & conditions of the Work will be governed as mentioned in the tender document.

This letter of award is being issued to you in duplicate. You are requested to return the duplicate copy of the letter of award immediately duly signed and stamped as a token of your unequivocal acceptance and confirmation of the same.

Thanking You,

Yours faithfully,

(Name & Designation)

# Annexure – II

#### (To be submitted on non-judicial stamp paper of Rs. 100)

## FORMAT FOR PERFORMANCE BANK GUARANTEE

#### To, The WAPCOS Limited, 76-C, Sector 18, Institutional Area Gurugram, Haryana-122015.

\_\_\_\_ (Employer's name) (hereinafter referred to as "the In consideration of Employer") which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to (Contractor's name & address) (hereinafter referred to as "the Contractor" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer's Notification of Award No. dt. and the same having been unequivocally accepted by the Contractor, resulting into a contract valued at Rs. (Rupees only) for <Name of Work> (hereinafter called "the contract") and the Contractor having agreed to provide a Contract Performance Security for the faithful performance of the entire contract equivalent to Rs. (Rupees \_\_\_\_\_\_only) (5% of the said value of the Contract to

the Employer).

(name & address of bank) (hereinafter referred to as "the Bank" which We, expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer, on demand any or, all monies payable by the Contractor to the extent of Rs. \_(Rupees as aforesaid at any time upto only) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor or court. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Employer and further agrees that the guarantee herein contained shall continue to be enforceable till the Employer discharges this guarantee.

We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractor and accordingly discharges the guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from, time to time to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank. The guarantee shall not be affected by a change in the constitution of the bank or of the employer.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We The Said Bank do hereby declare that we have absolute and unconditional power to issue this guarantee in your favour under the Memorandum and Articles of Association or such other constitutional documents of the Bank and the undersigned have full power to execute this guarantee under the Power of Attorney / Post Approval Authorization dated \_\_\_\_\_\_\_\_ of the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank do hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you, free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_\_ only) and it shall remain in force upto and including \_\_\_\_\_\_ and shall be extended from time to time for such period as may be desired by M/s WAPCOS Limited to whom this bank guarantee has been given.

Notwithstanding anything contained herein

- ii) This bank guarantee shall be valid upto \_\_\_\_\_; and
- iii) our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee, only and only if you serve upon us a written claim or demand in terms of the guarantee on or before \_\_\_\_\_\_ (indicate a date twelve month after validity of Guarantee)

Dated this \_\_\_\_\_day of \_\_\_\_\_ at New Delhi.

Authorized Signatory of ..... Bank

Signature	Signature
Name	Name
Signature Code/ S.S no	Signature Code/ S.S no

# ANNEXURE – III

## (To be submitted on non-judicial stamp paper of Rs. 100)

#### FORMAT FOR MOBILIZATION ADVANCE PAYMENT BANK GUARANTEE

#### To, The WAPCOS Limited, 76-C, Sector 18, Institutional Area Gurugram, Haryana-122015

In consideration of WAPCOS LTD. (hereinafter referred to as "the Employer") which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to (Contractor's name) with its Registered /Head Office at (hereinafter referred to as "the Contractor" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer's Notification of Award No. dt. and the same having been unequivocally accepted by the Contractor, resulting into contract valued at Rs. а for (Rupees only) (hereinafter called "the contract") and the Employer having agreed to make an advance payment to the Contractor for performance of the above Contract amounting to Rs. only) as an advance against bank guarantee to be (Rupees furnished by the Contractor.

(name & address of bank) having its Head Office at We, (hereinafter referred to as "the Bank" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand any or, all monies payable by the Contractor to the extent of Rs. (Rupees onlv) as aforesaid at any time upto without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Employer discharges this guarantee. We further agree that no change in the constitution of the Bank or of the Employer shall affect this guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from time to time, to vary the advance or to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We the Said Bank do hereby declare that we have absolute and unconditional power to issue this guarantee in your favour under the Memorandum and Articles of Association or such other constitutional documents of the Bank and the undersigned have full power to execute this guarantee under the Power of Attorney/ Post Approval Authorization dated \_\_\_\_\_\_\_ of the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank does hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank does hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you, free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is limited to Rs.\_\_\_\_\_\_ (Rupees \_\_\_\_\_\_ only) and it shall remain in force upto and including \_\_\_\_\_\_ and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s \_\_\_\_\_\_ on whose behalf this bank guarantee has been given.

Notwithstanding anything contained herein

i)	Our	liability	under	this	guarantee	shall	not	exceed	Rs	_(Rupees
					onlv):					

- ii) This bank guarantee shall be valid upto and
- iii) our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee, only and only if you serve upon us a written claim or demand in terms of the guarantee on or before \_\_\_\_\_\_ (indicate a date twelve months after the validity of the guarantee).

Dated this \_\_\_\_\_ day of \_\_\_\_\_ at.....

Authorized Signatory of ..... Bank

Signature	Signature
Name	Name
Signature Code/ S.S no	Signature Code/ S.S no

# ANNEXURE-IV

# (On non-judicial stamp paper of Rs. 100 duly attested by Notary / Magistrate)

## FORMAT FOR INDENTURE FOR SECURED ADVANCES

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

- (1) That the said sum of Rupees .....so advanced by the WAPCOS to the Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
- (2) That the materials detailed in the said Account of Secured Advances which have been offered to and accepted by the WAPCOS as security are absolutely the Contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the WAPCOS against all claims to any materials in respect of which an advance has been made to him as aforesaid.
- (3) That the materials detailed in the said Account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer ...... Division (hereinafter called the Divisional Officer) and in the term of the said agreement.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to

inspection by the Divisional Officer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Divisional Officer.

- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorised by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the WAPCOS of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the WAPCOS will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the WAPCOS shall immediately on the happening of such default be repayable by the Contractor to the WAPCOS together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the WAPCOS in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the WAPCOS to repay and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the WAPCOS of the said sum of Rupees .....and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the WAPCOS may at any time thereafter adopt all or any of the following courses as he may deem best :-
  - (a) Size and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay same to the WAPCOS on demand.
  - b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the WAPCOS under these presents and pay over the surplus (if any) to the Contractor.
  - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.

- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be finally resolved as per provisions of clause 25 of the contract.

In witness whereof the said Contractor and WAPCOS by the order and under the direction of the WAPCOS have hereunto set their respective hands the day and year first above written.

#### SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor WAPCOS	For and on behalf of the		
NAME	NAME		
Designation	Designation		
in the presence of witness: 1	in the presence of Witness 1		
2	2		

# ANNEXURE-V

# (To be submitted on non-judicial stamp paper of Rs. 100)

# FORMAT FOR BANK GUARANTEE OF EMD

To,

The WAPCOS Limited, 76-C, Sector 18, Institutional Area Gurugram, Haryana-122015.

WHEREAS, M/s	having their Registered/Head Office at
(hereinafter ca	alled "the Bidder") has submitted his Bid dated
for the	[hereinafter called "the Bid"] to
M/s WAPCOS Limited (hereinafter called the Employer	er)
KNOW ALL PEOPLE by these presents that we	(name
of the Bank) having our head office at	(hereinafter called
"the Bank") are bound unto Employer in the sum of	f for which
payment well and truly to be made to the Employer, the	e Bank binds itself, its successors and assigns
by these presents.	

SEALED with the Common Seal of the said Bank this ..... day of ......month....... year.

THE CONDITIONS of this obligation are:

(1) If after Bid opening, the bidder withdraws his bid during the period of Bid validity specified;

OR

(2) If the bidder having been notified of the acceptance of his bid by .....during the period of Bid Validity:

i) Liability under this guarantee shall not exceed .....

ii) This bank guarantee shall be valid upto ..... and;

iii) Our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee only and only if you serve upon us a written claim or demand in terms of the guarantee on or before ...... (indicate a period twelve months after the date of issue of Bank Guarantee).

Dated this \_\_\_\_\_ day of \_\_\_\_\_ at.....

Authorized Signatory of ..... Bank

Signature	Signature
Name	Name
Signature Code/ S.S no	Signature Code/ S.S no

# ANNEXURE-VI

# (To be submitted on Contractor's original Letter Head)

## FORMAT FOR SEEKING EXTENSION OF TIME

- 1. Name of Contractor:
- 2. Name of work:
- 3. Agreement No. and Date:
- 4. Date of commencement of work as per Agreement:
- 5. Period and Stipulated date of completion as per Agreement:
- 6. Period for which extension of time already given:

1	Date of Start									
2	Scheduled Date Completion	e of								
3	Actual Date of Completion									
4	Days Delay (3-2)									
Sr. No.	Nature of Hindrance	Acti vity Affe cted	Date of Submi ssion	Date of Start of hindr ance	Date of remo val of hindr ance	Ove r- lap pin g peri od, If any	Net Hindr ance In day	Weig htage	Net effect ive day of hindr ance	Rem arks
1										
2										
Tota	no. of Days	1	1	1	1				0	

9) Reasons for present extension

10) Period for which extension is applied for

It is understood that we will not claim any additional cost due to above extension of time and also understand that WAPCOS have rights to act in accordance with provisions in relevant clauses of Contract Agreement.

Dated.....

#### **Contractor's Signature and Stamp**

#### Annexure – VII (On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate and will be signed by the person who sign the Original Agreement)

#### FORMAT FOR GUARANTE BONDS

# To Be Executed by Contractor for Structural Stability, Removal of Defects after completion of work

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable and guarantee against faulty workmanship, manufacturing defects of materials etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, for the minimum life of ten years, to be reckoned from the date of start of Defect Liability Period or Maintenance Period which ever is later, prescribed in the Contract.

The decision of the WAPCOS with regard to nature and cause of defects shall be final. During the period of guarantee the Guarantor shall make good all defects to the satisfaction of the WAPCOS calling upon him to rectify the defects, failing which the work shall be got done by the WAPCOS by some other agencies at the Guarantor's cost and risk. The decision of the WAPCOS as to the cost payable by the Guarantor shall be final and binding.

That if the Guarantor fails to make good all the defects, commits breach thereunder then the guarantor will indemnify the Principal and his successor against all loss, damage cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and / or damage and / or cost incurred by the WAPCOS the decision of the WAPCOS will be final and binding.

#### SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor

For and on behalf of the WAPCOS

NAME	_
Designation	
in the presence of witness:	
1	

. . . . . .\_\_\_

2\_\_\_\_\_

NAME
Designation
in the presence of Witness
1

2							

# Annexure – VIII

# (On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate and will be signed by the person who sign the Original Agreement))

# FORMAT FOR GUARANTE BONDS To Be Executed by Contractor for Water Proofing after Completion of Work

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for **ten years** from the date after the Defect Liability Period or Maintenance Period which ever is later, prescribed in the contract. NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be **ten years** to be reckoned from the date after the Defect Liability Period / Maintenance Period which ever is later, prescribed in the contract.

Provided that the Guarantor will not be responsible for the 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 damage to the roof.
- b. Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- c. The decision of the Principal Employer with regard to cause of leakage/seepage shall be final.

During this period of guarantee the Guarantor shall make good all defects and in case of any defect being found, render the building water proof to the satisfaction of the Principal Employer at his cost and shall commence the work for the rectification within seven days from the date of issue of the notice from the Principal Employer calling upon him to rectify the defects failing which the work shall be done by the Principal Employer by some other agency at the GUARANTOR's risk and cost. The decision of the Principal Employer as to the cost payable by the Guarantor shall be final and binding. That if Guarantor fails to make good all defects or commits breach there under then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and/or damage and/or cost incurred by the Principal Employer the decision of the owner will be final and binding on the parties.

IN WITHNES WHEREOF those presents have been executed by the GUARANTOR ......(Name and Designation who sign the Contract) on behalf of

.....(Name of Contractor Firm) and Principal Employer on the day, month and year first above written.

# SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor	For and on behalf of the Principal Employer/Employer
NAME Designation	NAME Designation
in the presence of witness:	in the presence of Witness
1	1
2	2

# ANNEXURE VIII (a)

# FORM OF BANK GUARANTEE BOND FOR WATER PROOFING WORK

- 3. We...... (indicate the name of the bank) further undertake to pay to Principal Employer any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by as under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
- 4. We...... (indicate the name of the Bank) further agree that the guarantee hereinafter contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of Principal Employer under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Principal Employer certified that the terms and condition of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

the said contractor(s) or by any such matter of 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 Bank or the contractor(s).
- 7. We..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of Principal Employer in writing
- 8. This guarantee shall be valid upto ...... unless extended on demand by Principal Employer. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. ......(Rupees ......only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged

Dated this \_\_\_\_\_ day of \_\_\_\_\_ at.....

Authorized Signatory of	Bank
Signature	Signature
Name	Name
Signature Code/ S.S no	Signature Code/ S.S no

#### Annexure – IX

#### (On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate)

#### FORMAT FOR GUARANTE BONDS FOR ANTI-TERMITE TREATMENT To Be Executed by Contractor for Anti Termite Treatment after Completion of Work

This Agreement made on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_ between\_\_\_\_\_ (Name of Contractor firm & address) \_\_\_\_\_\_ (hereinafter called the CONTRACTOR / GUARANTOR of the one part) and the \_\_\_\_\_\_ (hereinafter called Principal Employer/Employer of the other part) for Anti Termite Treatment Works for **<Name of Work>** 

WHEREAS This Agreement is Supplementary, to a Contract (hereinafter called the Contract) Contract no.\_\_\_\_\_\_ dated \_\_\_\_\_\_and made between the \_\_\_\_\_\_ (Name of Contractor) and WAPCOS LIMITED, 5<sup>th</sup> floor, Kailash Building, 26, K. G. Marg, New Delhi, whereby the contractor, inter alia, undertook to render the wooden work in the said contract recited completely Termite proof.

THE GUARANTOR hereby guarantee that the anti-termite treatment given by him will render the wooden works completely Termite proof and the minimum life of such Anti-Termite treatment shall be five years to be reckoned from the from the date after the Defect Liability Period or Maintenance Period which ever is later, prescribed in the contract.

During the period of guarantee the Guarantor shall make good all defects and in case of any defects being found render the wooden works termite proof to the satisfaction of the Principal Employer at his cost and shall commence the work for such rectification within seven days from the date of issue of notice from the Principal Employer calling upon him to rectify the defects, failing which the work shall be got done by the Principal Employer through some other Agency at the Guarantor's cost and risk. The decision of the Principal Employer as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to execute the Anti-termite works, or commits breach thereunder then the guarantor will indemnify the Principal and his successor against all loss, damage, cost of expenses or otherwise which may be incurred by him by reason of any of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and / or cost incurred by the Principal Employer on the decision of the Principal Employer will be final and binding.

(Name of Contractor Firm) and Principal Employer on the day, month and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor	For and on behalf of the Principal Employer/Employer			
NAME	NAME			
Designation	Designation			
in the presence of witness:	in the presence of Witness			
1	1			
2	2			

# ANNEXURE – X

# SAFETY CODES

- 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 <sup>1</sup>/<sub>4</sub> to 1(<sup>1</sup>/<sub>4</sub> horizontal and 1 vertical).
- 2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
- 4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.).
- 5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least ¼" for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person
- 6. (a) Excavation and Trenching All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m.

(5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

- (b) Safety Measures for digging bore holes:
  - i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
  - ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer-in-charge of the work;
  - Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all round 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 reparing the pump;
  - vi. After the borewell is drilled the entire site should be brought to the ground level.
- 7. Demolition Before any demolition work is commenced and also during the progress of the work,
  - (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
  - (ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
  - (iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- 8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
  - (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
  - (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
  - (iii) Those engaged in welding works shall be provided with welder's protective eyeshields.
  - (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
  - (v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated 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 :-

- (a) Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
- (b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
- (c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
- (d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
- (e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- (f) The area should be barricaded or cordoned of by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- (g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- (h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- (j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
- (k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away 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.
- (I) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- (m) The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- (n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- (o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- (p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

The Contractor shall not employ men and women below the age of 18 years on the work of

painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-

- (a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- (b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- (c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- 9. 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.
  - (viii) WAPCOS 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.
- 10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
- 11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
  - (i) (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) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
- 12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- 13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- 15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
- 16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

# ANNEXURE – XI

# MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS

# FOR WORKERS EMPLOYED BY CONTRACTORS

#### 1. APPLICATION

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

#### 2. DEFINITION

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

#### 3. FIRST-AID FACILITIES

- (i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
  - (a) For work places in which the number of contract labour employed does not exceed
    - 50- Each first-aid box shall contain the following equipments :-
      - 1) 6 small sterilised dressings.
    - 2) 3 medium size sterilised dressings.
    - 3) 3 large size sterilised dressings.
    - 4) 3 large sterilised burn dressings.
    - 5) 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
    - 6) 1 (30 ml.) bottle containing 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.
    - 1) 12 small sterilised dressings.
    - 2) 6 medium size sterilised dressings.
    - 3) 6 large size sterilised dressings.
    - 4) 6 large size sterilised burn dressings.
    - 5) 6 (15 gms.) packets sterilised cotton wool.
    - 6) 6.1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.

- 7) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label
- 8) 1 roll of adhesive plaster.
- 9) 1 snake bite lancet.
- 10) 1 (30 gms.) bottle of potassium permanganate crystals.
- 11) 1 pair scissors.
- 12) 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes / Government of India.
- 13) A bottle containing 100 tablets (each of 5 gms.) of aspirin.
- 14) Ointment for burns.
- 15) A bottle of suitable surgical antiseptic solution.
- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

#### 4. DRINKING WATER

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

# 5. WASHING FACILITIES

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

# 6. LATRINES AND URINALS

- (ii) Latrines shall be provided in every work place on the following scale namely :-
  - (a) Where female are employed, there shall be at least one latrine for every 25 females.
    - (b) Where males are employed, there shall be at least one latrine for every 25 males. Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto the first 100, and one for every 50 thereafter.
- (iii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iv) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (v) (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
  - (b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (vi) There shall be at least one urinal for male workers upto 50 and one for female workers upto 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 upto the first 500 and one for every 100 or part thereafter.
- (vii) (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.
- (viii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (ix) 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).
- (x) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

# 7. PROVISION OF SHELTER DURING REST

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

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

# 9. CANTEENS

- a. In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- b. The canteen shall be maintained by the contractor in an efficient manner.
- c. The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- d. The canteen shall be sufficiently lighted at all times when any person has access to it.
- e. The floor shall be made of smooth and impervious materials and inside walls shall be limewashed or colour washed at least once in each year.

Provided that the inside walls of the kitchen shall be lime-washed every four months.

- f. The premises of the canteen shall be maintained in a clean and sanitary condition.
- g. Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- h. Suitable arrangements shall be made for the collection and disposal of garbage.
- i. The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- j. 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 metre (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- k. (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.

(b) Washing places for women shall be separate and screened to secure privacy.

- I. Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- m. (a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipments 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.
- n. The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- o. 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.
- p. In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-
  - (a) The rent of land and building.
  - (b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
  - (c) The cost of purchase, repairs and replacement of equipment including furniture, crockery, cutlery and utensils.
  - (d) The water charges and other charges incurred for lighting and ventilation
  - (e) The interest and amounts spent on the provision and maintenance of equipment provided for the canteen.
- q. 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

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

# ANNEXURE-XII

# Contractor's Labour Regulations

#### 1. GENERAL

These Labour regulations shall be followed by the Contractor.

#### 2. **DEFINITIONS**

- (i) Workman means any person employed by contractor directly or indirectly through a subcontractor with or without the knowledge of the WAPCOS 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 Employer/ 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 Employer/ 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.
    - (i) No person below the age of 14 years shall be employed to act as a workman.
    - (ii) Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
    - (iii) Contractors shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
    - (iv) Wages shall have the same meaning as defined in the Payment of Wages Act.
  - 3. (i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
    - (ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
    - (iii) 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.
    - (iv) 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

- (iv) provided he has worked under the same contractor for a continuous period of not less than 6 days.
- (v) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

# 4. DISPLAY OF NOTICE REGARDING WAGES ETC.

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

#### 5. **PAYMENT OF WAGES**

- (i) The contractor shall fix wage periods in respect of which wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- (iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (vi) Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.
- (vii) All wages shall be paid through Bank or ECS or online transfer.
- (viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- (ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.
- (x) It shall be the duty of the contractor to ensure the disbursement of wages through bank account of labour.
- (xi) The contractor shall obtain from the Junior Engineer or any other authorised representative of the Engineer- in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:-

#### 6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

i) The wages of a worker shall be paid to him without any deduction of any kind except the following:-

- a. Fines
- b. Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
- c. Deduction for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
- d. Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
- e. Any other deduction which the Central Government may from time to time allow.
- No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.
   Note :- An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-X
- iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- v) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

# 7. LABOUR RECORDS

- i) The contractor shall maintain a Register of persons employed on work on contract in Form XIII of the CL (R&A) Central Rules 1971 (Appendix IV)
- The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- iii) The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- iv) Register of accident The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
  - a. Full particulars of the labourers who met with accident.
  - b. Rate of Wages.
  - c. Sex
  - d. Age
  - e. Nature of accident and cause of accident.
  - f. Time and date of accident.
  - g. Date and time when admitted in Hospital,
  - h. Date of discharge from the Hospital.
  - i. Period of treatment and result of treatment.

- j. Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- k. Claim required to be paid under Workmen's Compensation Act.
- I. Date of payment of compensation.
- m. Amount paid with details of the person to whom the same was paid.
- n. Authority by whom the compensation was assessed.
- o. Remarks
- v) The contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 (Appendix-XI) The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-X)
- vi) The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
- vii) The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII)
- viii) The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)

#### 8. ATTENDANCE CARD-CUM-WAGE SLIP

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

#### 9. EMPLOYMENT CARD

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

#### 10. SERVICE CERTIFICATE

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

#### 11. **PRESERVATION OF LABOUR RECORDS**

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

# 12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

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

#### 13. **REPORT OF LABOUR OFFICER**

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer-in-charge concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer-in-charge after the Competent Authority of WAPCOS has given his decision on such appeal.

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

#### 14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Engineer-in-charge concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Engineer-in-charge 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 :
  - a. An officer of an association of employers of which he is a member.
  - b. An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
  - c. Where the employers is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

#### 16. **INSPECTION OF BOOKS AND SLIPS**

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

#### 17. SUBMISSIONS OF RETURNS

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

#### 18. **AMENDMENTS**

The Central Government 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 Engineer-in-charge concerned shall be final.

**NOTE:** *APPENDICES mentioned in above "Contractor's Labour Regulation" will be as per the General Conditions of Contract-2020 – Construction Works of CPWD.* 

#### **ANNEXURE – XIII**

#### **NO CLAIM CERTIFICATE**

Addre	ess to :
The E	ngineer- in-Charge
WAP	COS Ltd.,
Subje	ct :
Ref:	1. Work Order no.:-
	2. Contract Agreement no.:-
Sir,	
	ave submittednos. of bills including final bill total gross amounting for the subject t of Rs
	only).

However, following payment are due with Employer:

- 1. Balance Net amount (if any) of Rs. -----/- against RA Bill No.------
- 2. Balance GST (if any) of Rs. -----/- against RA Bill No.-----
- 3. Performance Guarantee no. ------dated ------dated ------- amounting to Rs.-----------Bank which will be released by Employer as per tender conditions.
- 4. Security Deposit amounting to Rs.----/- which will be released by Employer as per tender conditions

We declare unequivocally that the above payments are full and final amount for execution of subject works against referred Contract Agreement with WAPCOS. We will not raise any further claim and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and that we shall continue to be bound by the terms and conditions of the Contract Agreement, as regards Performance of the Contract.

Yours faithfully,

(Signature, name and designation of the Authorized signatory)

Place:

Date:

Name and seal of bidder

# **SECTION – VII**

# **GENERAL TECHNICAL SPECIFICATION**

# **SECTION - VII**

### 1. TECHNICAL SPECIFICATIONS OF WORKS

#### 1.1. General

- 1.1.1. Unless otherwise specified, the Work will be executed strictly in accordance with the CPWD specification corrected up to date at the time of tenders, unless specified to contrary. The specifications to be generally followed will be the following specifications and codes:
- a) CPWD specification
- b) BIS specification
- c) National building code
- d) Schedule of Quantities (SoQ) and Drawings
- e) Particular specification as applicable for respective works specified herein.
- 1.1.2. Error or omission, if any in the nomenclature, rate or unit of the items or work shall be corrected as per DSR 2019.
- 1.1.3. Measurement of work shall be done as per CPWD specifications and BIS codes, as applicable.
- 1.1.4. Actual quantities of completed and accepted work shall only be paid.
- 1.1.5. Nothing extra will be paid to the contractor for any lead or lift unless otherwise specified for any material required directly or indirectly under the contract.
- 1.1.6. Nothing extra will be paid to the contractor for diverting water in the channels or streams if it becomes necessary for the execution and completion of the work.
- 1.1.7. The contractor shall be responsible and liable for proper and complete execution of the entire work and ensure coordination and completion of Civil, Electrical, Plumbing, Mechanical/ Fire Fighting works, etc.
- 1.1.8. Any rock extracted during excavation from site shall be recovered and the same shall be used in the random rubble masonry or for stone pitching as much as possible. However, any Royalty to be paid to the Government shall be paid by the contractor.
- 1.1.9. The percentage of contract rates for the various items, wherein Supply, Installation, Testing, Commissioning (i.e. SITC) are involved in the Schedule of Quantities, shall be payable against the following stage of work:

SI. No.	Stage of work	%age of Quoted Rate for Item
a)	On initial inspection of materials (as applicable)and delivery at Site in good condition	70%
b)	On completion of installation/ erection	20%
c)	On completion of Testing and Commissioning, as applicable	10%

#### 1.1.10. Material for installation

- a. The Contractor shall bring the various items & materials as per actual requirement at site at the time of execution of work. For any material brought prematurely at site without approval of Engineer-in-Charge, no payment shall be made for such material and the Employer shall not be responsible for its damage / deterioration. The make of material has been indicated in the tender document. The Engineer-in-charge shall reserve the right to instruct the contractor to remove the material which, in his opinion, is not as per specifications.
- Quality of material: All materials and equipment for installation / work supplied by the Contractor shall be new. They shall be of such design, size and materials as to satisfactorily function under the rated conditions of operation and to withstand the environmental conditions at site.
- c. The quantities of various items may vary from the quantities given in schedule of Quantity (SoQ)/ Bill of Quantity (BoQ). The Contractorshall bring the various items & materials as per actual requirement at site. Excess material more than the actual requirement shall not be accepted & paid by the Employer.
- d. Before start of the work the Contractor is required to submit the shop drawings. The shop drawings shall be approved by the Engineer-in-Charge.
- e. Before placing orders on the manufacturer for supply of cables, pole, fittings, pipes, etc. the contractor is required to get assessed the exact requirement of each size of the cable at site of work and get the same approved from the Engineer-in-charge. The Employer shall not take back any spare quantity of cable whether in pieces or in sealed drums/ containers, if procured more than that required at site / approved by the Engineer-in-charge.

However, it may be noted that the contractor shall have to arrange extra quantity of the cables, poles, fittings, pipes, etc. over and above that assessed by the contractor, before start of the work and approvedby the Engineer-in-charge, if such additional quantity of the cables, poles, fittings, pipes, etc., is required at site, in order to make the installation as covered in Scope of this work and in order to make the installation operational. Such quantity shall be paid as per contractual provisions of the Agreement.

### 1.1.11. Completeness of work

All hardware items such as screws, thimbles, G.I. wires, etc. which are essentially required for completing an SoQ item as per specifications will be deemed to be included in the item even when the same have not been specifically mentioned. All hardware materials such as nuts/bolts/screws/ washersetc. to be used in the scheduled items shall be zinc/cadmium plated iron. Nothing extra on account of same shall be paid.

1.1.12. For items/equipment requiring initial inspection at manufacturer's works' the contractor will intimate the date of testing of equipment at the manufacturer's works before dispatch. The Employer also reserves the right to inspect the fabrication job at factory and the Contractor has to make the arrangement for the same. The Contractor shall give sufficient advance notice regarding the dates proposed for such tests/inspection to the Employer's representative(s) to facilitate his presence during testing/fabrication. The Engineer-in-charge at his discretion may waive off such testing/fabrication. The cost of the Engineer-in-charge's visit to the factory will be borne by the Contractor. Also, equipment may be inspected at the Manufacture's premises before dispatch to the site by the contractor.

#### 1.1.13. Conformity with statutory Acts, Rules, Standards and Codes

- a. All components shall conform to relevant Indian Standard Specifications, International Standards and shall bear the stamp of the testing laboratory wherever existing and amended to date.
- b. In respect of all labor employed directly or indirectly on the work for the execution of the work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provision, BIS recommendations, factory act, and workman's compensation act, CPWD code and instructions issued from time to time. Failure to provide such safety requirements would make the Contractor liable for penalty. In addition, the Engineer-in- Charge, shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost incurred thereon from the Contractor.
- c. The contractor shall provide necessary barriers, signals and other safety measures wherever necessary so as to avoid accident. He shall also indemnify the Employer against claims for compensation arisingout of negligence in this respect. Contractor shall be liable, in accordance with the Indian law and Regulations for any accident occurring due to any cause. The Employer shall not be responsible for anyaccident occurred or damage incurred or claims arising their form during the execution of work, the Contractor shall cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

#### 1.1.14. Care of the Building

Care shall be taken by the contractor while handling and installing the various equipment 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 for the installation from the site of work.

# 1.1.15. Performance Guarantee for Equipment Installation including Electrical works

The Contractor shall guarantee among other things, the following:

- a) Quality, Strength and performance of the materials used.
- b) Safe mechanical and electrical stress on all parts under all specified conditions of operation.
- c) Satisfactory operation during the maintenance period.

# 1.1.16. Guarantee of Equipment Installation

All equipment/ installations shall be guaranteed for a period of 1 years from the date of taking over the installation by the Employer or for the period of the manufacturer's guarantee period whichever is greater against unsatisfactory performance and/or break down due to defective design, workmanship of material. The equipment 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 Employer that undue delay is being caused by the contractor in doing this, the same will be got done by the Employer at the risk and cost of the contractor. The decision of the Engineer-in-Charge in this regard shall be final.

# 1.1.17. Training, Operation & Maintenance

Training of Owner's staff for operation and maintenance of all equipment such as Transformer, CCTV system, all electrical Panels/Equipment's and any other equipment shall be arranged by Contractor. Inaddition to this, the Contractor shall be required to hand over all installed equipment's manuals to the Owner.

1.1.18. The entire installation shall be at the risk and responsibility of the contractor until these are tested and handed over to the Employer. However, if there is any delay in construction from the Employer side, the installation may be taken over in parts, but the decision on the same shall rest with Engineerin Charge which shall be a binding on the contractor.

# 1.1.19. Power Supply

Electrical power/Alternate source including backup power supply (as and when required) shall be arranged by the contractor for Construction, installation purpose at his own cost and payment for electricity charges shall be made by contractor. Electrical power supply required for testing of entire installation after completion shall be arranged by the Employer/Owner.

# 1.1.20. Data Manual and Drawings to be furnished by the Contractor

The Contractor would be required to submit the followings for approval before commencement of

installation.

- a. Technical submittal/ catalogue/ brochures of all equipment's installations to Engineering -In-Charge. Only after approval of such approval, the Contractor should place order for equipment and bring it to site.
- b. Any other drawing/information not specifically/mentioned above but deemed to be necessary for the job by the contractor.

# 1.1.21. Completion Plan & Test Certificate for Equipment Installations including Electrical

The layout of all the installation for all services with proper dimensions, shall be finalized inconsultation with the Engineer-in-Charge or his representative and the layout shall be got approved by the Engineer-in-Charge before start of the work.

Contractor shall submit completion plan/ Electrical drawings in triplicate before finalisation of bill.

# 1.1.22. Verification of correctness of Equipment at Destination:

The materials shall be procured only from the manufacturers and their authorized dealers and documentary proof for such procurement and supply shall be produced by the contractor as required by Engineer-in-charge. The contractorshall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected. The Employer reserves the right to send such materials to the manufacturers / authorized test laboratory to verify the genuineness and quality of the product. The Contractor shall submit all documentary details in fulfillment of this of invoices, test certificates; gate passes etc. to prove the genuineness of material/purchases from manufacturer or authorized dealerswhich are used at site as per agreement.

# 1.1.23. Painting:

All equipment works shall be painted at the workshops/factory/manufacturing unit before dispatch to the site. Care shall be taken by the contractor while handling and installing the various equipment and components of the work to avoid damage to the finishes of equipment. 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 for the installation from the site of work.

# 1.1.24. Maintenance during defect liability period

Sufficient trained and experienced staff shall be made available to meet any exigency of work attends the complaint during the defect liability period from the handing over of the project.

1.1.25. The contractor shall ensure that all the skilled persons managed / deployed for executing the electrical work possess wireman license issued by approved authorities, otherwise he will not be permitted to execute the work. Also, consequences arising due to the default of the contractor to comply with thiscondition would be contractor's responsibility only.

# **SECTION – VIII**

# SCOPE OF WORK

# SECTION-VIII SCOPE OF WORK

#### 1.0 INTRODUCTION

WAPCOS Limited, as Project Management Consultant on behalf of Assam University (AU), invites online percentage rate e-tender for the "Repair and Maintenance Works of Various Buildings at Assam University", hereinafter referred to as the Project /Work.

#### 2.0 Scope of Work

#### 2.1.1 General

The scope of work covered in this tender shall be as per the Schedule / Bill of Quantities, specifications, instructions, orders issued to the Contractor from time to time during the entire period of execution. The brief scope of works covered are listed below but not limited to the following:

- Construction of Shed with truss and Profile Sheet over Block-II of Examination building, Horizontal extension of Netaji Mukta Mancha and Construction of Ceiling, Flooring works with 2 nos. of Toilet block and Electrification at First Floor of International Guest House, Assam University Silchar Campus.
- 2. External Painting works with Acrylic smooth exterior paint along with some minor repairing of external damaged wall, PVC rain water pipe, window glass, widow stay and handle, outside door repairing/changing etc. at following locations of departmental buildings at Assam University Silchar.
  - a) Political Science, History & Sociology Building
  - b) Earth Science Building
  - c) Library & Information Science Building
  - d) Mathematics Building
  - e) Computer Science Building
  - f) Chemistry Building
  - g) Physics Building
  - h) Ecology Building
  - i) Life Science Building
  - j) Biotechnology Building
  - k) Microbiology Building
  - I) Law Department Building
  - m) Social work Building
  - n) Philosophy Building
  - o) English & Foreign Language Building
  - p) Academic Building (Bengali, Hindli & Sanskrit)
  - q) Fine Arts & Miscommunication Building
  - r) Old Guest House Building
  - s) Boys Hostel No. 2 Building
  - t) Boys Hostel No. 1 Building
  - u) Girls Hostel No. 1 Building
  - v) Student Community Centre Building
  - w) Central Library & Computer Centre Building
  - x) Women's Day Care Building

- y) Health Centre Building
- z) Administrative Building
- 3. Repairing and protection of Water reservoir coverings of different Academic Departments from Monkeys and repairing of Grill openings and cupboard of 'Boys and Ladies' Hostel at Assam University Silchar Campus.
- 4. Repairing and Painting of MBA Building (Old building & Annex building) at Assam University Silchar Campus

**Note:-** Above components are as per present requirement which may be change after award as per site conditions and requirements of Assam University.

#### 3.0 NOC'S / APPROVALS/ CLEARANCE FROM LOCAL BODIES/ AUTHORITIES

All the necessary Statuary Approvals/ NOCs/ Clearances such as Forest NoC, if necessary; approval of local Govt. body for architectural plans; Approval of ground water board, if necessary; clearance of height from concerned authority, if any; Fire NoC, Lift NoC, DG Sets, if any; which are required from any Govt. Department / body, before start of the work / during execution of work / after execution of work & before handing over the project, are the responsibility of the Contractor and are in the scope of work of the Contractor.

If any modification/revision is required in all the above mentioned Statuary Approvals/ NOCs/ Clearances, before start of the work / during the work / after execution of work are the responsibility of the Contractor and are in the scope of work of the Contractor. The fee deposited for getting approvals, shall be deposited by the Contractor to the concerned Department / Authorities and will be reimbursable to the Contractor on producing of original receipt of deposited fee and no extra cost for the same shall be claimed by the contractor.

#### 4.0 Reference to the Standard Codes of Practice

All Standards, Technical Specifications and Codes of practice referred to shall be latest editions including all applicable official amendments and revisions. The Contractor shall make available at site hard copies of all latest editions of relevant codes and specifications such as CPWD Specifications, Delhi Schedule Rates (2021), CPWD Specifications for Horticulture and Landscaping work (2018), and relevant/ applicable BIS codes.

Wherever Indian Standards do not cover some particular aspects of design/ construction, relevant International Standards shall be referred to. The Contractor shall make available at site such standard codes of practice.

# 5.0 LIST OF MAKE FOR CIVIL WORKS

Acceptable makes of materials to be used in the work are as follows. In case of non-availability of these makes, after the approval of WAPCOS/ Assam University the Contractor can use the alternative makes only BIS marked materials of equivalent reputed brand. Non BIS marked materials may be permitted by the WAPCOS only when BIS marked materials are not manufactured. If any make / brand of the "Material / Article" is not mentioned in following make list, then standard top 5 Manufacturers/ Agencies /Brand Make for that " Material / Agency" will be considered for approval by WAPCOS / Assam University.

S.N	Material /Article	Confirming IS Code	Manufacturers/ Agencies /Brand Make	
1.	Cement (OPC 43 grade) /PPC	IS : 8112: 1989/ IS : 1489 (Part- 1) 2015	A.C.C., Jaypee Cement, Ultratech, Shri Cement, Gujarat Ambuja Cement, Star Cement, Cement Corporation of India, Dalmia InfraPro (Dalmia Bharat Cement),	
2.	AAC Blocks	-	Xtralite (Ultra Tech Cement Ltd.) Areocon (Hil), Nucon (Green Way building material India Pvt Ltd.), Magicrete (Magicrete Precast), NCL	
3.	Steel Reinforcement	IS 1786:2008	Thermo Mechanically treated bars Fe- 500 Grade conforming to IS 1786:2008 from approved brands i.e. SAIL, Tisco, RINL, JSW Steel Ltd, JINDAL, Shyam Steel	
4.	Structural Steel	IS 2062:2011	SAIL, Tisco, RINL, JSW Steel Ltd, JINDAL, Shyam Steel	
5.	Stainless Steel	-	Jindal SS Ltd (JSL), Salem (SAIL), SAIL (SAIL), Shyam Steel	
6.	Corrugated GI Sheets	IS 277:2003	TATA SAIL, JSW, JSPL, BHUSAN	
7.	Colour coated profile sheet	-	TATA KOMDA; JINDAL	
8.	Aluminium extruded sections	IS 733: 1983 & IS 1285:2002	Jindal, Hindalco, Indian Aluminium Co. NALCO	
9.	Aluminium plain sheets	IS 733: 1983 & IS 1285:2002	Jindal, Hindalco, Indian Aluminium Co. NALCO	
10.	Factory made Machine pressed laminated flush door shutter	IS 2202 (Part 1): 1999 And relevant IS Code	Century, Greenply, Kitply, Duroply Merino	
11.	Block Board	IS 1659:2004	Century, Greenply, Kitply, Duroply Merino	
12.	Flush Door Shutter	IS 2202 (Part 1): 1999	Century, Greenply, Kitply, Duroply Merino	
13.	Boiling Water proof plywood, Block board, Commercial Plywood	IS 303:1989	Century, Greenply, Kitply, Duroply Merino	
14.	Aluminium door & window fittings	Relevant IS Code	Jyoti, Argent, Everest	
15.	PVC rigid foam sheet	-	Rajshri or equivalent	
16.	Hydraulic Floor Spring	IS 6315:1992	Dorma, Hardwin, Ozone, Dorset	
17.	Door Closure	IS :3564	Dorma, Hardwin, Ozone, Dorset	
18.	Float Glass	-	Saint Gobain (Saint Gobain India Pvt. Ltd.) Modiguard (Gujarat Guardian Ltd.) Asahi (Asahi India Glass Ltd.)	
19.	SWR uPVC pipe & fitting	IS 4985:2000 & IS 14233:1999	Supreme, Finolex, Prince Astral, Prakash, Ashirwad	

S.N	Material /Article	Confirming IS Code	Manufacturers/ Agencies /Brand Make	
20.	CPVC Pipe & fittings	IS 16088:2012, IS 15778:2007	Supreme, Finolex, Prince Astral, Prakash, Ashirwad	
21.	Ceramic glazed wall tiles	IS 13712:1993	Kajaria, Orientbell, Somany, NITCO, HR-Johnson	
22.	Vitrified Tiles	IS 15622:2006	Kajaria, Orientbell, Somany, NITCO, HR-Johnson	
23.	Bitumen VG-30, VG-10 Etc.	IS 73:2013	As per particular Specification of IOCL, BPCL, HPCL.	
24.	Admixtures	IS9103:1999	FOSROC, SIKKA, CICO Technologies Ltd. Pidilite	
25.	Mild steel tubes	IS 1239:1990	As per IS Code	
26.	1 <sup>st</sup> quality acrylic distemper (Ready Mix)		Bison (Lewis Berger), Beauty (NEROLAC), Tractor Uno (Asian Paints)	
27.	Premium Acrylic smooth exterior Paint with silicon additives		ULTIMA (Asian Paint), Premium Exterior Emulsion (Dulux), Weather coat long life 7 (Berger)	
28.	Paints	IS : 101 : 1986	Lewis Berger, Asian Paints, Nerolac, Dulux	
29.	Steel/Wood Primer Paints	IS : 14177 : 1994	Lewis Berger, Asian Paints, Nerolac, Dulux	
30.	Factory Made C.C. Interlocking Paver Blocks	IS : 15658 : 2006	NITCO, KK, NTC	
31.	Bitumen 85/25	IS : 702 : 1988	HPCI, IOCL	
32.	Water Proofing Compound	IS : 2645: 2003	FOSROC, Dr. FIXIT, BASF,CICO, SIKKA	
33.	Crystalline Waterproofing Compound	IS : 2645: 2003	FOSROC, Dr. FIXIT, BASF, SIKKA	
34.	G.I. Pipes	IS : 1239	TATA, Jindal Hissar	
35.	PVC Water Storage Tanks	IS: 12701:1996	Sintex, Plasto	
36.	P.T.M.T. Accessories	IS : 9763	Prayag, Prakash	
37.	Mirror		Saint Gobain (Saint Gobain India Pvt. Ltd.), Modiguard (Gujarat Guardian Ltd.) Asahi (Asahi India Glass Ltd.), Atul (Autl Glass Industries Ltd.)	
38.	Stainless Steel Sink	IS : 13983 : 1994	Hindware, NIRALI, CERA, JAYNA	
39.	Sanitary ware /Chinaware	As per IS Code	Cera, Parryware, Hindware, Jaquar	
40.	C.P. Fittings and accessories for bathroom/toilets	IS: 7784 : 1993	Jaquar, Gem, Parko, Hindware, Cera, Parryware	
41.	RCC Pipes	Confirming to IS Specification	Indian Hume Pipes (Indian Hume Pipe Ltd.) Jain & Co ( Jain Spun Pipes Co)	
42.	SFRC Cover and grating	IS 12592 (2002)	KK (KK Manhole and gratings Co Pvt Ltd)	

S.N	Material /Article	Confirming IS Code	Manufacturers/ Agencies /Brand Make	
43.	CI Manhole Cover	IS 1726 (1991)	RPFM (M/s Raj Pattern Makers &	
			Founders Pvt Ltd.) BIC Bengal Iron	
			Corporation), Neco (Jayaswal Neco	
			Ltd.)	
44.	Foot Rest (for Manhole)		KGM (KGM Exports), Accurate Buildcon	
			(Accurate Buildconcompany) Neco	
			(Jayaswal Neco Ltd)	
45.	Water stops		Hydrotite (Sika India), Dr. FIXIT (Pidilite	
			Industires), Ferrous Crete (Ferrous	
			Crete (India) Pvt. Ltd.)	
46.	Aluminium doors/windows	IS 733 & IS	Hindalco (Hindalco Industries Ltd.)	
	sections	1285	Jindal (Jindal Aluminium Ltd)	
47.	Glass Reinforced Concrete		Terrafirma (terrafirma GRC Industries),	
	(GRC) jail		Ecovision (Ecovision Industries Pvt	
			Ltd.).	
			Mahesh GRC (Mahesh Prefab Pvt Ltd.)	
48.	SS Doors & Windows		JINDAL, Dorma, KICH, Godrej, Ozone	
	Hardware & Fittings			
49.	Wall Putty		Dalmia, JK, Birla, Asian	
50.	Factory Made steel Glazed/	IS : 1038-1983	SKS Steel Industries (Havlox)/Madhu	
	Gauged windows and		Industries /Multiwin/M/s Classic	
	ventilators		Engineers and fabricators/Ajanta	
51.	Solar Lighting System	ECBC-2017	WIPRO/Anchor-	
			Panasonic/Philips/Crompton/TATA BP	
			solar	
52.	CP Brass Fittings/Fixtures	IS : 8931	Jaquar, Kohler, Marc (Premium	
			Quality), Hindware, Parryware/Parko	
53.	Tubular Profile steel door/		TATA/APL Apollo/ Jindal/ Classic	
	windows; Steel windows;		Engineers & fabricators	
	Pressed steel door frames			
54.	Pre painted / powder coated		APL Apollo/ Jindal/ Classic Engineers &	
	CRC Windows		fabricators/ JK Enterprises/ NCL Alltek	
			& Seccolor Ltd.	
55.	Kitchen Equipment's		R.R.R Total Kitchen Solution, Triune	
			Kitchen Solution, Quadra Gallery	
56.	Furniture		Durian, Godrej and Spacewood office	
			Solutions, Methodex Systems, Crystal	
			Furnitech.	

#### 6.0 LIST OF MAKE FOR ELECTRICAL WORKS

Acceptable makes of materials to be used in the work are as follows. In case of non-availability of these makes, after the approval of WAPCOS/ Assam University, the Contractor can use the alternative makes only BIS marked materials of equivalent reputed brand. Non BIS marked materials may be permitted by the WAPCOS only when BIS marked materials are not manufactured. If any make / brand of the "Material / Article" is not mentioned in following

make list, then standard top 5 Manufacturers/ Agencies /Brand Make for that "Material / Agency" will be considered for approval by WAPCOS / Assam University.

S.NO	Material /Article	Manufacturers/ Agencies /Brand Make	
1.	DG Engine	Ashok Leyland/Cummins/Cater pillar/KOEL Mahindra & Mahindra/Escorts	
2.	DG Alternator	Kirloskar/KEL/Crompton Greaves (AL. Series)/KEC/ Stamford	
3.	Battery (Lead Acid / Mntc. Free)	Amara Raja/Exide/Crompton Greaves/Prestolite/Pace Setter/Standard/	
4.	HV Switchgear	Crompton/Kirloskar/Voltas/C&S Electric	
5.	LT Switchgear	L&T/Schneider Electric/Siemens/Legrand/Havells	
6.	Vaccum Circuit Breaker	GE/Siemens/C&S Electric	
7.	Transformer (Oil filled / Dry	ABB/ Crompton Greaves/	
	Туре)	Kirloskar/ Siemens /Alstom/ Uttam	
8.	HT Panels	ABB/ Siemens/ L&T/Schneider/Kirloskar	
9.	Air Circuit Breaker	L&T/Schneider Electric/Siemens/Havells	
10.	MCCB (ICS=ICU)	L&T/Schneider Electric/Siemens/Legrand/Havells	
11.	MV/LT Panels	TTA/CPRI Fabricators with panels cleared by CPRI.	
		Note: Contractor shall take prior approval of make of	
		Panels before procurement.	
12.	SDF Units	L&T/Schneider Electric/Siemens/Legrand/Havells	
13.	Power Contractors	L&T/Schneider Electric/Siemens/BCH/GE/Power	
		Controls	
	Change Over Switch	L&T/HPL/Havells/Standard/Control & Switch Gears	
	Air Brake Switch	National/Kiran/Pactil/Atlas/Power grid switchgears	
	Pin and Disc Insulator	Jayshree/WS/IEC/BHEL/Bharat Industries	
	11 KV Horn Gap Arrestor	Sahal/Pactil/GEC/SEW	
	Lightning Arrestor	Atlas/GE/Elaro/Lamco/International Oblum/ Elpro	
	Drop out Fuses	National /Kiran/Pactil	
20.	GI/MS Pipe (ISI Maked)	ATC/ATL/BST/GSI/ITC/ITS/ IIA/JST/Jindal/TTA/ Tata/Zenith	
21.	APFC Relay	L&T/Schneider Electric/Neptune Ducati/Syntron/Trinity Electronics	
22.	IDMT Relay	AVKC/SEGC	
23.	C.T./P.T.	AE/MP/Marshal/Pactil/Kappa/L&T/Ashmor/Waco/Meco/ Gilbert/ Trio/Indotech/Indo coil	
24.	Selector Switch	L&T/Kaycee/IMP/Vaishno/Seizer/rass control	
25.		Vaishno/Siemens/L&T/AE/IMP/Rass	
26.	Power Capacitors (MPP/APP)	Khatau/Junkar/L&T/ EPCOS(Siemens)/ABB/Crompton/Schneider Electric / Neptune Ducati	
27.	Digital Panel Meters i/c Multi- Function Meter	- Conzerv/Schneider Electric/AE/Digitron/IMP/Meco/ Rishabh/Univeral/HPL/L&T/ABB	
28.	Ammeter/ Voltmeter	AE/Univeral/Rishabh/Kaycee/Meco/Enercom	

S.NO	Material /Article	Manufacturers/ Agencies /Brand Make	
29.	Cold shrink HT/LT Cable Joint Kit	Denson/3M(M-Seal)/Paychem	
30.	Rubber Matting (ISI Marked)	Jyoti Rubber Udyog/Raychem/Padmini/Dozz	
31.	AVM Pads	Dunlop/Poly Bond	
32.	MCB/Isolator/ELCB/RCCB/Dis tribution Board	Crompton/Havells/MDS Legrand/L&T/ Schneider Electric/Siemens/Polycab/C&S/(Make of DBs and circuit breakers shall be same)	
33.	TPN Switches & HRC Fuses	Crompton/Havells/MDS Legrand/L&T/ Schneider Electric/Siemens/Polycab/C&S/(Make of DBs and circuit breakers shall be same)	
	PVC Conduits (ISI Marked) Colour: Ivory/Grey	AKG/Polycab/Avon Plast/Precision/finolex/Astral	
35.	Steel Conduits (ISI Marked)	BEC/Bharat/Gupta/AKG/RMCON/Steel Krafts	
36.	Piano/Modular Switches and Sockets	Legrand/Havells/Polycab/Schneider/Anchor	
37.	Cable Tray	MEM/Bharti/Ratan/Slotco/Profab	
38.	Cable Glands	MCI, Comet/Jainson/Dowells	
39.	Thimbles/Lugs	Jainson/Dowells/Ascon	
40.	1.1 KV/11 KV grade AI. Condr., XLPE insulated armoured cables (ISI Marked)	Finolex/Havells/Polycab/KEI	
41.	Fire Survival cable	Finolex/Havells/Polycab/KEI	
42.	Wires (PVC insulated copper conductor cable FRLS – ISI marked)/ Telephone Cables/Submersible cables/ Co-axial/TV cables	Finolex/Havells/Polycab/KEI	
43.	Fans and Exhaust fans (All Types)	Khaitan / Havells/Crompton/Orient/ Bajaj/Usha/Polycab	
44.	LED Luminaries i/c street light fittings (ISI Marked)	Khaitan / Havells/Crompton/Orient /Bajaj/Usha/Polycab	
45.		Panduit/Legrand/Schneider/Polycab	
	Centrifugal Pump	BE Power/Beacon/Crompton/ Kirloskar/KSB	
47.		BE Power/Beacon/Crompton/ Kirloskar/KSB	
48.	Motors	Crompton Greaves/Schneider Electric/Kkirloskar/ Siemens	
49.	Motor Starter	L&T/Siemens/BCH/GE Power Control/Schneider Electric	
50.	Fresh Air Fans	Khaitan/Havells/Crompton/Orient/Bajaj/Usha/Polycab	
51.	Single Phase Preventer / Overload Unit	L&T/ Minilec/Siemens	
52.	Timers	L&T/ Minilec/Siemens/AE	
53.	Gate Valve/Foot Valve/NRV/Butter Fly Valve	Advance/Audco/Johnson Controls/Zoloto/Annapurna /Fountain/Kirloskar/Leader/Sant/Trishul/Kartar/Inter Valve	

S.NO	Material /Article	Manufacturers/ Agencies /Brand Make	
54.	Single/Double Headed GM Landing valve	New Age (Mumbai)/Safex/Ceasefire/Padmini/Life guard	
55.	Hydrant Valve	New Age (Mumbai)/Safex/Ceasefire/Kalpana/L&T valves Ltd. /Life guard	
56.	Sprinkler/ Hose reel & Hose Pipe (ISI marked)	Safex/Agni/Newage/Ceasefire/Fire Guard/Omex	
57.	Fire Extinguisher (ISI marked)	Minimax/Lifeguard/Safeguard/Safex/Omex	
58.	Water Purifier	Eureka Forbes/Kent/ion Exchange /LG	
59.	Inverter System	Sukam/Microtek/Luminous	
60.	Electrical Water Storage Heater	Racold/Crompton/Havells/Bajaj/Polycab	

#### 7.0 PROJECT EXECUTION

#### 7.1 **Project Execution & Supervision Aspects**

1. The bidder, who shall act as Contractor for the project shall be composed of qualified and experienced experts, who can carry out all the routine construction works as a fully competent and independent unit.

However, in preparing his proposal for the construction, the bidder should allow for a suitable mechanism which will ensure thorough co-ordination of the design and execution teams, so that each team is at all times fully aware of the remedies to common problems used by the other team.

- 2. The Project Head/Project Manager Representative on behalf of the Contractor should be authorized with whom day to day interactions shall be made by the Engineer-in-Charge for execution and supervision of works. He should be a senior Civil Engineer with at least 20 years of professional experience out of which 10 years in planning and construction of building works. He should have executed at least one major building work of similar in nature as proposed by the bidder. He should be familiar with modern construction equipment and Contract conditions. The candidate should have a thorough understanding and experience with IS code relating to building construction.
- 3. The bidder shall provide competent personnel for the project execution and supervision who shall be managed by the Project Head/Project Manager at site in performing the assignment under this Contract.

The bidder's personnel should have the required experience and expertise in conducting similar type of works with highest professional standards.

The bidder is required to set-up the site office at the work site and make their own arrangements for the accommodation, furniture and equipment etc.

The project execution and supervision personnel should be mobilized from the date of commencement of works by the bidder. During the Defects Liability Period, the bidder would be expected to provide technical advisory services on an "as required" basis.

After award of the Contract, the Employer expects all of the proposed personnel to be available during implementation of the Contract.

- 4. Contractor shall carry out proper layout of the building to ensure appropriate alignment, line and level in column & beams by Total Station Equipment only. The Contractor must be doubly sure about the correctness of the same as per layout plan and structural drawings. The certificate of the correctness of layout of the building will be submitted by the contractor to the Engineer in Charge for release of first RA bill of particular building.
- 5. It is the duty of the Contractor to:
  - Ensure that high quality of construction is achieved
  - Ensure that all works are carried out in full compliance with the Engineering design, technical specifications and Contract documents;
  - Check / conduct all necessary measurements, tests, and control the quality of various items of work s and in accordance with the relevant code of Building specification with the latest edition.

#### Key Personnel:

The contractor shall employ at his cost the adequate number of minimum technical staff during the execution of this work and defect liability period as per **Enclosure-I** or more depending upon the requirement of work. For this purpose the numbers to be deployed, their qualification, experience as decided by Employer shall be final and binding on contractor. The contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at site, whenever required by WAPCOS to take instructions.

Within 15 days of letter of intent, the contractor shall submit a site organizational chart and Resume including details of experience of the Project-in-Charge and Technical staff as per following table for the approval of Employer.

The removal of such additional staff from the site shall only be with the prior written approval of Engineer-in-Charge. The contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer-in-Charge shall be final and binding on the contractor. In case the contractor fails to employ the staff as aforesaid, then the amount mentioned in Enclosure-I shall be recovered from the Contractor.

#### 7.2 Minimum Site Equipment Required

Availability (either owned or leased having validity for the period till completion of project) of the key and critical equipment required at site as per the quantum of work will be as per **Enclosure-II.** The bidder is to provide their own estimate of the number of equipment, commensurate with their work plan and methodology.

#### 7.3 Equipment for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting necessary tests shall be provided at the site laboratory by the bidder at his own cost as per **Enclosure-III** 

#### 7.4 Instructions of Engineer-in-Charge

The Engineer-in-Charge will, but not be limited to, the following:

- give the order to commence the works;
- inspect Contractor's plant and equipment's and recommend augmentation/ rectification

of deficiencies, if required

- order special tests of materials and/or completed works, and/or order removal and substitution of improper materials and/or the works as required;
- review all the test result/ certificates of all construction materials and inspect sources of materials to establish their quality suitable to the required standard.
- check all bituminous mix designs and concrete mix design proposed by the bidder where ever required and in due time and suggest modifications in the mix design, laying methods, sampling and testing procedure and quality control measures, to ensure required standard and consistency in quality at the commencement of times;
- check and certify the laboratory and field tests carried out by the Contractor and also carry out independent tests, if required. The report of such test shall be submitted to the Engineer-in-Charge within a period of 7 days of such tests.
- inspect the works during the construction period and the Defects Liability Period, and to issue Defects Liability Certificates after rectification by the Contractor of defects notified to him by the Engineer-in-Charge;
- check the setting out the works;
- instruct the removal from the site of materials which are not as per specifications or reconstruction of parts of the works which do not comply with the specification;
- direct to submit monthly progress reports, Quarterly progress report, Final completion Report and Bar Chart / Programme chart to complete the work in stipulated time period.
- direct to prepare Running Account Bills for works carried out by the Contractor, and certify completion of parts or the totality of the works and record of measurements in the measurement book.
- direct to send certified bill to the WAPCOS office for approval of competent authority and payment.
- direct to prepare deviation / variation (if any) with duly certified supporting documents as per the provisions in contract and will send the same to WAPCOS office for the approval of Competent Authority.

#### 7.5 Duties & Responsibilities of the Project Head/Project Manager of contractor

The duties of the Project Head/Project Manager of the Contractor are, to supervise construction of the works and, to test and examine any material to be used or workmanship employed in connection with the works. The principal responsibilities of the Project Head/Project Manager of the Contractor are likely to be but not limited to as follows:

- To follow the instructions given by the Engineer-in charge, Principal Employer and WAPCOS
- To prepare detailed bar chart depicting each & every activity of the work along with quantity and time bar, to complete the work in stipulated time period, which will be displayed in the Site office.
- To provide the all residential facility at site camp to the Engineer-in-Charge as per provisions
- to ensure that the construction work is accomplished in accordance with the technical

specifications and Contract Conditions;

- to identify construction problems and delays and to recommend to the Engineer-in-Charge, actions to expedite progress
- to ensure proper keeping of records
- to monitor and check the day-to-day quality control and quantity measurements of the work carried out under the Contract
- to prepare in consultation with the Engineer-in-Charge, a Construction Supervision Manual outlining routine and procedures to be applied in Contract management, construction supervision and administration;
- to prepare a maintenance manual outlining the routines to be adopted in each specific reach and for the cross-drainage works and buildings;
- to comply with his contractual obligations in executing work in all matters concerning safety and care of the works (including the erection of temporary signs) and, if required, to request the Contractor to provide any necessary lights, guards, fencing and watchmen for smooth and effective working and traffic flow.
- to write a day-by-day project diary which shall record all events pertaining to the administration of the Contract, request forms and orders given to the Contractor, and any other information which may at a later date be of assistance in resolving queries which may arise concerning execution of the works;
- preparation & submission of monthly progress reports, Quarterly progress report, Final completion Report.
- Preparation, Submission & time to time revision of Bar Chart / Programme chart to complete the work in stipulated time period.
- Any other work as outlined in contract agreement, which is the responsibility of the Contractor.

#### 7.6 Documents Prepared Shall be the Property of the Employer

All plans, drawings, specifications, designs, reports and other documents (both computer hard copies and soft copies) in performing the works shall become and remain the property of the Employer, and the Contractor shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Employer, together with a detailed inventory thereof. The Contractor may retain a copy of such documents but shall not use these documents for purposes unrelated to this Contract without the priory written approval of the Employer.

#### 7.7 Completion Schedule/deliverables

#### (a) The Milestone for the proejct are as follows:-

SN.	Description of Mile stone (Physical)	Time allowed (from the date of start)
1	1/8 <sup>th</sup> of the whole of the work	1/4 <sup>th</sup> Period of Completion
2	3/8 <sup>th</sup> of the whole of the work	1/2 <sup>th</sup> Period of Completion
3	3/4 <sup>th</sup> of the whole of the work	3/4 <sup>th</sup> Period of Completion

SN.	Description of Mile stone (Physical)	Time allowed	
		(from the date of start)	
4	Whole of the work	Whole Completion Period	

#### (b) The Completion Time Period is as follows:-

SI. No.	Name of Work	Completion Time Period
1	Construction of Shed with truss and Profile Sheet over Block-II of Examination building, Horizontal extension of Netaji Mukta Mancha and Construction of Ceiling, Flooring works with 2 nos. of Toilet block and Electrification at First Floor of International Guest House, Assam University Silchar Campus.	300 days
2	External Painting works with Acrylic smooth exterior paint along with some minor repairing of external damaged wall, PVC rain water pipe, window glass, widow stay and handle, outside door repairing/changing etc. at different location of departmental buildings at Assam University Silchar.	75 days
3	Repairing and protection of Water reservoir coverings of different Academic Departments from Monkeys and repairing of Grill openings and cupboard of 'Boys and Ladies' Hostel at Assam University Silchar Campus.	120 days
4	Repairing and Painting of MBA Building (Old building & Annex building) at Assam University Silchar Campus	75 days

#### 7.8 Other Site Facilities

The cost of providing the work/facilities stated below are to be borne by the Contractor and shall be deemed to be included in the quoted cost by the Contractor.

• The contractor shall provide Residential accommodation at construction camp for WAPCOS Site Engineer / Inspection Team, comprising of fully furnished 1 room set with attached kitchen & toilet along with full facilities of 24 hours electricity & drinking water supply. The size of room shall be 12ft X 12ft., size of Kitchen 6ft X 6ft and size of Toilet 6ft X 6ft along with 2 nos. single beds with mattress, 2 cupboards, 1 table & 2 chairs.

- Contractor shall install sufficient numbers of PTZ Camera at appropriate places along with dedicated internet line for online monitoring and quality control of Construction Activities. The Photographs / Videography shall be shared directly from site to the quality control cell established by Principal Employer/Employer HQ and no extra cost in this regard shall be paid to the contractor.
- The contractor shall also make sufficient arrangement for Photography/Videography preferably by maintaining a camera/video camera at site so that video photographs.
- The Contractor shall regularly share the geotagged photographs of ongoing construction to designated what's App group. The photographs need to be shared in every stage of construction for important items and milestones like foundation reinforcement, RCC casting of foundations, columns, beams & slab, masonry work, etc. These photographs shall also be submitted as part of each Running Account Bill.
- The Contractor shall make all arrangements for ground breaking ceremony/ inaugural function etc for the project as required and the cost towards it deemed to be included in his rates/offer.
- The same shall be furnished as per requirement of Monthly Progress report / Quarterly Progress Report/ Final completion report.
- The Contractor shall provide arrangements for firefighting at his own cost. For this purpose, he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water. This equipment shall be provided at suitable prominent and easily accessible places and shall be properly maintained. The Contractor may be subject to periodic fire prevention inspections and any deficiency or unsafe condition shall be corrected by the Contractor at his own cost and to approval of the Engineer-in-Charge and the relevant authorities.

These fire prevention inspections shall include but not limited to the following:

- ✓ Proper handling, storage and disposal of combustible materials, liquids and wastes.
- $\checkmark$  Work operations which can create fire hazards.
- ✓ Access for firefighting equipment.
- ✓ Type, size, number and location of fire extinguishers or other firefighting equipment.
- ✓ Inspection and maintenance records for extinguishers
- ✓ Type, number and location of containers for the removal of surplus materials and rubbish.
- ✓ General housekeeping
- For the purpose of quick communication between the Engineer-in-Charge and the Contractor or his Representative, Site Order Books shall be maintained at site in the manner as described below:

Any communication, relating to the works may be conveyed through records in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of the Contract. Each site order book shall have machinenumbered pages in triplicate and shall be carefully maintained and preserved by the Contractor and shall be made available to the Engineer-in-Charge as and when demanded. Any instruction which the Engineer-in-Charge may like to issue to the Contractor may be recorded by him in the site order book and two copies thereof taken by the Engineer-in-Charge for his record. The Contractor or his Contractor or Representative may similarly record in the site order book any communication he may like to send to the Engineer-in-Charge. Two copies thereof when sent to the Engineer-in-Charge and receipt obtained thereof, will constitute adequate services of the communication to the Engineer-in-Charge.

- The Contractor shall display all permissions, licenses, registration certificates and other statements required to be displayed under various labour laws and other legislations applicable to the works at the site office and also maintain the requisite register / records factually and up to date and keep them ready for inspection by the concerned authorities and also make available the same to the Engineer-in-Charge / Owner for inspection.
- The relevant I.S. codes of practice and other relevant codes shall be of latest version with their amendments/ revisions. The Contractor shall keep and maintain copies of the latest editions of codes at the work site and make it available to Employer whenever required.
- In case of Guarantees specified for certain periods for due performance of materials and specialist items of work, the Contractor shall be a co-guarantor with the Specialist Contractor or Supplier offering such Guarantee and shall offer such co- Guarantee in a format approved by the Employer.
- If desired by the Employer, the Contractor shall stack and spread to the require profile the excess earth available suitable for filling in layers not exceeding 200mm, watering, consolidation within the campus and dispose of all surplus material to the nearest dumping ground/ land fill area without any additional cost, etc.
- The Employer may if require, request the assistance of Contractor labour for purpose other than from part of Contract. The Contractor will not unreasonably deny such assistance and the Engineer-in-Charge decision in this regard shall be binding on the Contractor. The Contractor will be then paid on the basis of minimum wages rates and provision made in the General Conditions of Contract.
- Contractor shall provide safety gadgets to the Employer officers.

#### 7.9 Drawings

#### 7.9.1 Good for Construction Drawings

The work shall be carried out in accordance with the approved architectural drawings, structural drawings, MEP services drawings to be issued from time to time, by the Engineer-in-Charge, and approved shop drawings prepared by the Contractor. Before commencement of any item of work the Contractor shall correlate all the relevant architectural and structural drawings, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available from there is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale.

The stage wise drawings shall be released as "GOOD FOR CONSTRUCTION" from time to time as per requirement of that particular stage, by the Engineer-in-Charge and revised drawings as per any additions/ modifications/ alterations/ deletions will be issued to the Contractor progressively. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge before execution of the work. The Contractor alone shall be responsible for any loss or damage occurring by the commencement of work based on any erroneous and or incomplete information and no claim whatsoever shall be entertained by the department on this account.

The levels, measurements and other information concerning the existing site as shown on the conceptual / layout drawings are believed to be correct, but the bidders should verify the same for themself and also examine the nature of the ground as no claim or allowance whatsoever shall be entertained on account of any errors or omissions and commissions in the levels or strata turning out different from what is shown on the drawings.

Two copy of contract documents including Drawings furnished to the Contractor shall be kept at the Sites and the same shall at all reasonable times be available for inspection.

#### 7.9.2 Coordinated drawings

Before taking up the work, the Contractor shall prepare shop drawings for the works listed below for various civil and electrical services showing details of layout in plan including sections & elevations & large-scale details and Contractor shall plan and mobilize his resources as per these drawings and as per actual site conditions to facilitate convenient execution, installation as well as maintenance of these items. Nothing extra shall be payable on this account.

#### 7.9.3 Shop drawings

The bill of quantities, technical specifications and drawings together shall be considered as a tender requirement and the work shall be carried out as per good for construction (GFC) drawings, issued by Engineer-in-Charge. The Contractor shall study the GFC drawings and taking into account actual site conditions and selected material and requirements shall prepare shop drawings for the following works, as fully coordinated drawings, as given above.

- a. Aluminium work, Stainless steel work and railings etc.
- b. Expansion joint work
- c. Reflected Ceiling Plan (RCP), coordinated with all ceiling related services.
- d. Marble, granite, vitreous, ceramic, tile work details.
- e. All Electrical work
- f. All Sanitary and sewerage work
- g. All plumbing works.
- h. Rainwater Pipe details/ position, roof slopes etc.
- i. Drainage details.
- j. Door Window details
- k. All steel fabrication work.
- I. Fixture, Furniture and Equipment (FFE) work.
- m. Any other works detail if required.

Within the time frame agreed with the Engineer-in-Charge, the Contractor shall prepare shop drawings using latest version of AutoCAD. Shop drawings shall show all layouts, details in plans & sections showing all connections, junctions, bends, supports, clearances. fixing arrangements with dimensions room, etc shall be prepared by the Contractor on AutoCAD based on the architectural drawings and site measurements. All measurable items quantities shall be mentioned on each shop drawing being submitted for approval by the Contractor. 3 sets of shop drawings (soft copy also) shall be submitted for approval and Seven sets of final shop drawings after approval by Engineer-in-Charge shall be submitted by the Contractor along with the soft copy. The shop drawings, shall be prepared as per schedule given in PERT Chart.

Technical submittals of manufacturer's catalogues and technical data shall be submitted for

approval. The Contractor shall designate an Engineer responsible for issue and preparation of shop drawings and control of GFC drawings.

#### 7.9.4 As built drawings

- i. The Contractor shall make available four (04) sets of completed Building Drawings, "As Built Drawings" along with literatures, manuals, warranty certificates etc. of various installed fittings, fixtures and equipment for the completed projects. This shall be the prerequisite for payment of final bill.
- ii. The Contractor shall make available three (03) sets of all services drawings including Electrical & HVAC work internal and external services i.e. Water Supply, Sanitary line and Drainage lines. This shall be the prerequisite for payment of final bill. These drawings shall have the following information:
  - a. Run off for all piping and their diameters including soil, waste pipes and vertical stacks.
  - b. Ground and invert level of all drainage pipes together with locations of all manholes and connections, up to outfall.
  - c. Run off for all water supply lines with diameters location of control valves, access panels etc.

#### 7.10 Testing and Commissioning

- The Contractor shall arrange electricity at his own cost for testing of the various electrical and mechanical installations as directed by Engineer-in-Charge and for the consumption by the Contractor for executing the work. Also all the water required for testing various electrical installations, fire pumps, firefighting/ firefighting equipment, fire sprinklers. and testing water supply, sanitary and drainage lines, water proofing of underground sump, overhead tanks, water proofing treatment etc. shall be arranged by the Contractor at his own cost. Nothing extra shall be payable on this account.
- Testing of equipment shall be carried out as per technical Specifications, manufacturer's
  recommendation and latest standards available up to date. The testing report shall be
  submitted along with Operation and Maintenance manual of the equipment at the time of
  handover.
- Contactor to provide training for operation and maintenance of equipment through respective manufacturer for the routine and preventative maintenance of equipment post Defect Liability Period.
- The Contractor shall demonstrate trouble free functioning of all the Civil and E&M installation sand services. The Engineer-in-Charge or his authorized representatives shall carry out final inspection of the various Civil and E & M services and installations. Any defect(s) noticed during demonstration shall be rectified by the Contractor at his own cost to the entire satisfaction of the Engineer-in-Charge. Nothing extra shall be payable on this account.

### Enclosure-I Desired Site Organization Structure

Minimum Level of Execution Team and Qualification/Experience of Key Staff to be deployed by the Contractor during execution of relevant works/fields is as follows:

SN.	Designation	Qualification	Minimum Experience	Minimum No. Required	Rate at which recovery shall be made from the contractor in the event of not fulfilling
Α	Principal Techn	ical Manpower	Deployment d	uring Exect	ution of Work
	Project Head/	Graduate	10 years	1	Rs. 80,000/- per month
1	Project	Engineer			
	Manager	(Civil)			
2	Project	Graduate	5 years	1	Rs. 45,000/- per month
	Engineer	Engineer			
	(Civil)	(Civil)			
3	Project	Graduate	5 years	1	Rs. 45,000/- per month
	Engineer	Engineer			
	(Electrical)	(Electrical)			

#### Enclosure-II Deployment of Minimum no. of Plant and Machinery by the Contractor

Whereas it is entirely the responsibility of the contractor to deploy sufficient plant and modern mechanical equipment to ensure compliance with the Contract, the following list is an indicative list of the minimum plant and machinery.

SN.	List of Plants and Machineries	Minimum nos. required
1	Batch Mix Concrete Plant with the provision of SCADA of adequate capacity (18 Cubic meters per hour and above) at each site	1 no.
2	Field testing equipment	1 set or more as per site requirement
3	Rock Drilling Equipment	10 no. or more as per site requirement
4	Latest model of Theodolite + Levelling	1 no.
5	Total Station	1 no.
6	Truck & tipper	1 no. or more as per site requirement
7	Transit Mixer (at least 6 cubic metre capacity)	1 no. or more as per site requirement
8	Vibrator equipment (electrical & fuel type)	4 no. or more as per site requirement
9	Concrete pump of capacity at least 15 cubic metre per hour	1 no.
10	Mechanical excavator (Crawler mounted)	1 no.
11	Loader with Backhoe (tyre mounted)	1 no.
12	Minimum Steel staging & shuttering material	As per site requirement and to complete the work within schedule time period
13	Water Pumps	1 no. or more as per site requirement.
14	Compaction Roller	1 no.

Note: The bidder shall deploy additional plant & machinery as deemed fit and required to complete the project within stipulated completion period, without any additional cost to the Employer.

### Enclosure-III Equipment for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting necessary tests shall be provided at the site laboratory by the bidder at his own cost as per following details.

SN	Equipment	Quantity
Α	Mandatory Equipment	-
1	Automatic Cube testing machine	1 No.
2	Slump Cone	2 Nos.
3	Weighing scale platform type 100 kg capacity	1 No.
4	Sets of sieves for coarse aggregate (40,20,10,4.75mm)	1 Nos.
5	Sets of sieves for fine aggregate [4.75; 2.36, 18; 600; 300 & 150 micron	1 Nos.
6	Cube moulds size 150mm x 150mm x 150mm	30 Nos.
7	Core cutter for soil compaction with accessories	1 No.
8	Rebound hammer test Digital rebound hammer	1 No.
9	Digital pH meter least count 0.1pH	1 No.
10	Graduated glass cylinder	2 No.
11	Water testing Kit	1 No.
12	TDS meter	2 No.
13	Hot Air Oven Temp. Range 50°C to 300°C	1 No.
14	Measuring Jars 100ml, 200ml, 500ml	1 set of each size
15	Moisture content rapid moisture meter standard	1 No.
16	Poker Thermometer (Concrete Road) 0°C to 100°C	1 No.
17	Vernier calipers 12" and 6" sizes	1 No. each
18	Electronic balance 600g x 0.01g. 10kg and 50kg	1 No.
19	Aggregate impact value testing machine with blow counter	1 No.
20	Separate Cube Tank for 7 days cube testing	1 No.
21	Separate Cube Tank for 28 days cube testing	1 No.
В	Other Equipment as and when required	
1	Tensile Briquette testing machine	
2	Vicats apparatus with Desk Pot	
3	Megger & earth resistance tester	
4	Pumps and pressure gauges for hydraulic testing of pipes	
5	Physical balance weight up to 5kg	
6	Digital thermometer up to 1500°C	
7	Gauging trowels 100mm & 200mm with wooden	
8	Spatula 100mm & 200mm with long blade wooden handle	
9	Crushing value apparatus	
10	Screw gauge 0.1mm – 10mm, least count 0.05 mm	
11	GI tray 600x450x50mm, 450x300x40mm, 300x250x40mm	
12	Digital Micrometer least count 0.01mm	
13	Digital paint thickness meter for steel 500-micron range	
14	Electric Mortar mixer 0.25 Cum capacity	
15	Thickness gauge for measuring flakiness index	
16	Elongation gauge	

SN	Equipment	Quantity
17	Measuring Cylinder 3,5,10 & 15 litre Cylinder	
18	Pycnometer	
19	Pulse velocity Test	
20	Bar Relocator	
21	Other Equipment as required for the work and as required by	
21	the Inspection Team	

**NOTE**: Any other equipment for laboratory tests at site will be the way it is outlined in relevant IS Codes and / or as directed by the Employer's Representative. Quality Control Engineer shall monitor collection of Sample and conducting regular testing at site maintaining propriety and the very best standard followed in industry of construction. All relevant IS Codes, special publications as per latest amendment/edition shall be referred.

# SECTION – IX

## **FINANCIAL PROPOSAL**

Description	Percentage Quoted (Excess / Less / at par)	Total Amount as per % Quoted (Excluding GST) (Rs.)
Repair and Maintenance Works of Various Buildings at Assam University	DO NOT FILL PERCENTAGE HERE	DO NOT FILL COST HERE
Total amount in words: DO NOT FILL COST HERE AS	S IT IS TECHNICA	L PROPOSAL FILE

### SUMMARY OF COST FOR PERCENTAGE RATE TENDER

#### Note:-

- The Performa for filling the percentage rate is given in Microsoft excel sheet. The bidder shall fill the percentage only up to two decimal place in soft format. The bidder will upload same filled percentage quote in soft Microsoft Excel copy during uploading of financial bid.
- <u>The bidder shall quote Percentage up to two decimal only in bill of quantity of</u> <u>tender.</u>
- Prices quoted by the bidder shall include all Materials, Tools & Plant, labour, supervision, profit; other levies together with all general risks, liabilities and obligations set out or implied in the contract, applicable Labour Cess, cost of insurance to this contract, all applicable tax liabilities like Income Tax & Surcharges, etc. Any other taxes /cess as per Government directives shall be deducted from each bill paid to the Contractor, from time to time. GST shall be payable extra as per prevailing rates. It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST), shall be reimbursed to the Agency only after uploading of bills by Contractor on GST Portal " to avail Input benefit of GST
- The Contractor shall issue Tax Invoices to the Employer showing (i) Basic amount (ii) GST amount separately in each bill. It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST), shall be reimbursed to the Agency only after uploading of bills by Contractor on GST Portal "to avail Input benefit of GST".
- The company shall be performing all its duties of deduction TDS and other deduction on payment made to the contractor as per applicable legislation in force on the date of submission of bid or to be newly / amended introduced during the execution of the Contract.

## **Detailed Bill of Quantities**

#### SI. Name of the Work Amount (Excl. GST) No. Construction of Shed with truss and Profile Sheet over Block-II of Examination building, Horizontal extension of Netaji Mukta Mancha and Construction 1 1,41,83,833.00 of Ceiling, Flooring works with 2 nos. of Toilet block and Electrification at First Floor of International Guest House, Assam University Silchar Campus. External Painting works with Acrylic smooth exterior paint along with some minor repairing of external damaged wall, PVC rain water pipe, window glass, 2 1,07,65,138.00 outside widow stay and handle, door repairing/changing etc. at different location of departmental buildings at Assam University Silchar. Repairing and protection of Water reservoir coverings of different Academic Departments from Monkeys and repairing of Grill openings and 3 63,37,304.00 cupboard of 'Boys and Ladies' Hostel at Assam University Silchar Campus. Repairing and Painting of MBA Building (Old building & Annex building) at Assam University Silchar 4 40,77,714.00 Campus Total = Rs. 3,53,63,989.00

#### SUMMARY OF COST

#### **ABSTRACT OF COST**

Name of work: Construction of Shed with truss and Profile Sheet over Block-II of Examination building, Horizontal extension of Netaji Mukta Mancha and Construction of Ceiling, Flooring works with 2 nos. of Toilet block and Electrification at First Floor of International Guest House, Assam University Silchar Campus.

SI.	Name of the Building	Amount (Excl. GST)
No.		
1	Mukta Mancha	62,95,655.00
2	International Guest House	55,49,664.00
3	Examination Building - Block II	23,38,514.00
	Total = Rs.	1,41,83,833.00

#### Name of work: Construction of Horizontsl Extension (30mX26m) and Toilet block (One Unit) and Septic Tank of Netaji Mukta Mancha at Assam University Campus Silchar. ABSTRACT OF COST

Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer- in.c-darge         Demolishing cement concrete manually/ per disposal of material set work in excavation by mechanical means (Hydraulic excavato)/manual means over areas (exceeding 30 cm in depth. 15 m in with as well as 10 sgm on plan) including getting out and disposal of excavated are hubed upto 50 m and int upto 15 m, as directed by Engineer-intorary.         Lim 18.00         205.45         30,468.235           2         2.6.         3.1.1 sgm on plan) including getting out and disposal of excavated arth lead upto 50 m and int apport of grade excluding the cost of centering and shuttering - All work up to plinth level         Lim 4.0.00         7,365.00         2,99,019.00           3         4.1.1         Size of and shuttering including strutting from attratis sources : 4 graded stane aggregate monominal size derived from matural sources)         grade struttering - All monominal size derived from matural sources)         grade struttering - All sources         grade struttering - All monominal size derived from matural sources)           4         4.3.3         centering and shuttering including strutting. monolinal size derived from matural sources)         grade struttering - All sources         grade struttering - All monolinal complete above plinth level up to for V level straightering, notating, bring places in position         146.30         8,512.00         12,45,305.60           6         5.22A.6         5000 cromes. Sources         Sgm Jakas of grade Fe stral grades, Cromoles         sg         5,902.0	SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
15.2.2     Noninal concrete 1/4/3 or learner mix (i/c enu/valent design mix)     cm     10.20     1,239.00     112,638       2     2.6     Earth work in excavator/manual means over areas (exceeding 30 or in depth, 1.5 m in width as well as 10 spren or plan industing getting out of upto 1.5 m, as directed by Engineer-incharge.     cm     148.30     205.45     30,468.235       3     2.6.1     All linds of sall     Providing and laying in position cement concrete of shuttering - all work up to plantin level:     cm     148.30     205.45     30,468.235       4.1     1.2.24 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mn nominal size derived from work for 15 km     cm     40.60     7,365.00     2,99,019.00       4     4.3     Gettering and shuttering including stotuting superstructure above glinh level up to flor.     sm     88.25     307.00     27,092.75       5     6.4.1     Emerting and shuttering including stotuting ing listances and stores in 1     cm     146.30     8,512.00     12,45,305.60       6     5.222.6     Thermo-Mechanically Treated bars of grade Fe source manual store and proved plant level.     Sgm     1,340.00     294.85     3,95.099.00       7     13.1     12.11 (cement : 4 coarse sand) cement disting engines ect.     Sgm     1,31.00.00     168.95     2,2,13,245.00       7     13.1     12.11 (cement : 16 coarse sand) corter t			Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer -				
2       2.6       Earth work in excavation/main means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge, cm       148.30       205.45       30,468.235         3       4.1       Anisot of solid       cm       148.30       205.45       30,468.235         3       4.1.       Specified grade excluding the cost of centering and shuttering - All work up to plinth level :       cm       148.30       7,365.00       2,99,019.00         4       4.3.       Gentering and shuttering including strutung, room and shuttering, room and shuttering including strutung, room and shuttering, room and shuttering including strutung, room and shuttering, room and shuttering, room and shuttering, room and shuttering including strutung, room and shuttering, room and shuttering including strutung, room and shuttering, room and shuttering, room and shuttering, room and and room and shuttering, room and and room and shuttering, room and room		15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c	cum	10.20	1,239.00	12,638
3     4.1     Providing and laying in position cenent concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :	2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift				
3     4.1     specified grade excluding the cost of centering and shuttering - All work up to plinth level :		2.6.1	All kinds of soil	cum	148.30	205.45	30,468.235
4.1.3from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)cum40.607,365.002,99,013.0044.3.3Centering and shuttering including strutting Foundations, footing, bases for columnsSqm88.25307.0027,092.7556.4.4Singerstructure above plinth level up to floor V level in all shames and sizes in : a superstructure above plinth level up to floor V level in all shames and sizes in : a straightening, cutting, bending, placing in position and binding all complete above plinth level.cum146.308,512.0012,45,305.6075.22AThermo-Mechanically Treated bars of grade Fe- straightening, cutting, bending, placing in position and binding all complete above plinth level.Sqm1,340.00294.853,95,099.00813.1112 fm centent plaster of mix : straightening cutting, fixing in position and applying a priming coat of approved steel primer, including and complete above plinth level.Sqm1,340.00294.853,95,099.00810.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00912.50Providing and fixing precoated galvanised iron profile sheet size, shape and plath of corrugation as approved by Engineer-in-charge 0.55 mm (th 0.05 %) total coated thickness with zinc coating 12 grams per sqm as per 15: 277, in 240 mp steel grade, 5-7 micros montelse watabars at polycester top coat 15-18 microns. Sheet should have protective guard film of 25Sqm912.50Froviding and fixing precoated galvanised trion purples, rafters and truces excluding the cost	3	4.1	specified grade excluding the cost of centering and				
4     4.3     propoling etc. and removal of form work for :		4.1.3	from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	40.60	7,365.00	2,99,019.00
4.3.1Foundations, footings, bases for columnsSqm88.25307.00227,092.75Brick work with common burnt clay F.P.S. (non superstructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V levelImage: Constructure above plinth level up to floor V le	4	4.3					
5       6.4       modular) bricks of class designation 7.5 in superstructure above plinth level up to foor V level       1       <		4.3.1	Foundations, footings, bases for columns		88.25	307.00	27,092.75
6.4.1Cement motar 1:4 (1 cement: 4 coarse sand)cum146.308,512.0012,45,305.6065.22AStreightening, cutting, bending, placing in position and binding all complete above plinth level.Image: Complete above plinth level.Image: Complete above plinth level.Image: Complete above plinth level.Image: Complete above plinth level.713.112 mm cement plaster of mix :Image: Complete above plinth level.Image: Complete above plinth level.Image: Complete above plinth level.813.1.113.4 (1 cement: 4 fine sand)Sqm1,340.00294.853,95,099.00810.16including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washer etc. completekg13,100.00168.9522,13,245.00910.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00912.50Froyiding and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per 15: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25Sqm880.00671.555,90,964.00912.50Image: Correct aballe fixed using self drilling / self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved suffaces, excluding the cost of purelins, rafters and trusses and including cutting to size an shape wherever required.Sqm	5	6.4	modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level				
65.22Astraightening, cutting, bending, placing in position and binding all complete above plinth level.Image: Complete above plinth level.65.22A.65000 or more. 13.112 mm cement plaster of mix : 12 mm cement plaster of mix : Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. cromolateSqm1,340.00294.853,95,099.00810.16Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including welding and bolted with special shaped washers etc. cromolate washers etc. cromolatekg13,100.00168.9522,13,245.00910.16.2Hot finished seamless type tubes of the sheet and polyeset top coat 15-18 microns. Sheet should have protective guard film of 225 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved suffaces, excluding the cost of puring, rafters and trusses and including cutting to size and shape wherever required.Sqm880.00671.555,90,964.001012.51as per 15: 277, in 240 mpa steel roofing accessories 0.50 mm (+0.05 %) total coated thickness, Xinc coating 120 grams per sqm as per 15: 277, in 240 mpa steel grade, 5-7 microns minimum to avoid scratches and shape wherever required.Sqm880.00671.555		6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)		146.30	8,512.00	12,45,305.60
J.22A.0500D or more.Kg3,302.00393.034,35,254.30713.112 mm cement plaster of mix :13.1.111.4 (1 cement: 4 fine sand)Sgm1,340.00294.853,95,099.00Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shapedkg13,100.00168.9522,13,245.0010.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00910.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00910.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00910.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00912.05transportation and pick of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per Si: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.1012.51Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in	6	5.22A	straightening, cutting, bending, placing in position				
13.1.11:4 (1 cement: 4 fine sand)Sqm1,340.00294.853,95,099.00Steel work in built up tubular (round, square or including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shapedImage: Comparison of the special shape of the sp		5.22A.6	500D or more.	kg	5,502.00	89.65	4,93,254.30
8       10.16       Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting fixing in position and applying a priming coat of approved steel primer, including cutting, hoisting precised galvanised       kg       13,100.00       168.95       22,13,245.00         9       10.16.2       Hot finished seamless type tubes       kg       13,100.00       168.95       22,13,245.00         9       10.16.2       Hot finished seamless type tubes       kg       13,100.00       168.95       22,13,245.00         9       10.16.2       Hot finished seamless type tubes       kg       13,100.00       168.95       22,13,245.00         9       12.50       Torviding and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sgm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns ingress of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.       Sqm       880.00       671.55       5,90,964.00         10       12.51       Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sgm as per IS: 277, in 240 mpa steel grade, 5	7			Cam	1 240 00	204.95	2.05.000.00
10.16.2Hot finished seamless type tubeskg13,100.00168.9522,13,245.00Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 225 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.Sqm880.00671.555,90,964.001012.51Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :88671.555,90,964.00	8		Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped		1,340.00	294.85	3,95,099.00
912.50profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ 		10.16.2	Hot finished seamless type tubes	kg	13,100.00	168.95	22,13,245.00
1012.51sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :	9		Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm			
10.1         12.51.1         Ridges plain (500 - 600mm)         metre         32.00         450.60         14,419	10	12.51	sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/				
	10.1	12.51.1	Ridges plain (500 - 600mm)	metre	32.00	450.60	14,419

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
10.2	12.51.5	Crimp curve	Sqm	70.00	422.50	29,575.00
11	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	Sqm	245.60	131.45	32,284
12	13.41	Distempering with oil bound washable distemper of approved brand and manufacture to give an even				
	13.41.1	shade : New work (two or more coats) over and including water thinnable priming coat with cement primer	Sqm	1,277.00	162.55	2,07,576
13	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
	13.43.1	Water thinnable cement primer	Sqm	245.60	64.45	15,829
14	13.46	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10				
	13.46.1	sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sgm)		1,307.00	166.85	2,18,072.95
15	10.25	Steel work welded in built up sections/ framed work, including cutting,hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	2,445.00	142.30	3,47,923.50
16	10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory				
	10.30.1	windows, all complete with : 4.0 mm thick glass panes	Sqm	10.50	940.30	9,873.15
17	11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of				
	11.3.1	steps etc. complete 40 mm thick with 20 mm nominal size stone aggregate	Sqm	840.00	545.00	4,57,800.00
18	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required.				
	17.4.1	One urinal basin with 5 litre white P.V.C. automatic	each	5.00	5,268.00	26,340.00
19	17.7	flushing cistern Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	each	4.00	3,392.00	13,568.00
20	18.16	Providing and fixing brass stop cock of approved				
	18.16.1	quality : 15 mm nominal bore	each	8.00	303.85	2,430.80
21	11.41A	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				_,
	11.41A.1 11.41A.1.1	Double charge vitrified tile polished finish of size Size of Tile 600 x 600 mm	Sqm	23.60	1,268.00	29,924.80

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
22	8.31	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of	Sqm	62.50	1,063.00	66,437.50
23	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
23.1	18.7.2	Internal work - Exposed on wall 20 mm nominal dia Pipes	metre	40.00	325.00	13,000.00
23.2	18.7.3	25 mm nominal dia Pipes Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre- painted with polyester paint, all complete for all heights as per specifications, drawings and as		40.00	408.00	16,320.00
	12.58.1	diracted by 8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/ sq. cm, bending strength 100 kg/sq. cm , of size 595x595 mm, having perforation of dia. 10 mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg /cum	Sqm	21.50	1,851.00	39,796.50
25	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
	18.49.1	15 mm nominal bore	each	8.00	434.00	3,472.00
26	18.48A	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI : 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support i/c fittings & fixtures for tank shall be paid separately.	per litre	2,500.00	9.70	24,250.00

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
51. 140.	Item NU.	Providing and fixing white vitreous china pedestal	Jint	quantity	Nate	Allouit
		type water closet (European type) with seat and				
		lid, 10 litre low level white vitreous china flushing				
		cistern & C.P. flush bend with fittings & C.I.				
27	17.3	brackets, 40 mm flush bend, overflow arrangement				
	_	with specials of standard make and mosquito proof				
		coupling of approved municipal design complete,				
		including painting of fittings and brackets, cutting				
		and making good the walls and floors wherever				
	17.3.1	W.C. pan with ISI marked white solid plastic seat and lid	each	3.00	6,941.00	20,823.00
		Providing and fixing factory made single extruded				
		WPC (Wood Polymer Composite) solid decorative				
		type flush door shutter of required size comprising				
		of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood				
		powder/ rice husk/wheat husk) and non toxic				
		additives (maximum toxicity index of 12 for 100				
		gms) having minimum density of 650 kg/ cum and				
		screw withdrawal strength of 1800 N (Face) & 900				
		N (Edge), minimum compressive strength 50				
		N/mm2, modulus of elasticity 850 N/mm2 and				
28	26.88	resistance to spread of flame of Class A category				
		with property of being termite/borer proof,				
		water/moisture proof andire retardant. WPC to be				
		laminated with PVC foil of minimum 14 microns				
		thick of approved design pasted with hot melt				
		adhesive on both faces of shutter and fixing with				
		stainless steel butt hinges of required size with				
		necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-In-				
		Charge. (Note: stainless steel butt hinges and				
		necessary S.S screws shall be paid separately)				
			_			
	26.88.2	35 mm thick Providing and fixing on wall face unplasticised Rigid	Sqm	11.33	4,929.00	55,845.57
		PVC rain water pipes conforming to IS : 13592				
20	12 41	Type A, including jointing with seal ring conforming				
29	12.41	to IS : 5382, leaving 10 mm gap for thermal				
		expansion,				
	12.41.2	(i) Single socketed nines 110 mm diameter	metre	15.00	319.00	4,785.00
30	18.16	Providing and fixing brass stop cock of approved				•
	18.16.1	quality : 15 mm nominal bore	each	2.00	303.85	607.70
		Providing and fixing on wall face unplasticised -		2.00	200100	507170
		PVC moulded fittings/ accessories for unplasticised				
31	12.42	Rigid PVC rain water pipes conforming to IS :				
51	12.12	13592 Type A, including jointing with seal ring				
		conforming to IS : 5382, leaving 10 mm gap for thermal expansion				
	12.42.5	Bend 87.5°				
	12.42.5.1	75 mm bend	each	6.00	91.80	550.80
		Making soak pit 2.5 m diameter 3.0 metre deep				
32	19.32	with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8				
52	19.92	m long complete as per standard design.				
	19.32.1	With common burnt clay F.P.S. (non modular)	each	1.00	28,029.00	28,029.00
	1919211	bricks of class designation 7.5	cacit	1.00	<b>Total = Rs.</b>	69,86,620.00
				GST @ 6.	33% = Rs.	4,42,253.00
				Estimated	Total = Rs.	74,28,873.00
		Total Va	lue of	Work (Excl.	GST) = Rs.	62,95,655.00

#### Name of work: Estimate for Construction of Ceiling,flooring works and 2 nos. of Toilet Block at First Floor of International Guest House at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
1	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of				
	12.45.3	12.5 mm thick tapered edge gypsum moisture resistant board	Sqm	1,234.00	1,300.50	16,04,817.00
2	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing,paneling and dash fasteners to be paid for separately) :				
	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	240.00	564.80	1,35,552.00
3	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	66.64	1,018.05	67,842.85
4	21.8	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.		22.00	05.25	1 000 75
5	21.8.1 13.1	Upto 5mm depth and 5 mm width 12 mm cement plaster of mix :	metre	23.00	85.25	1,960.75

SI. No.		Description of Item	Unit	Quantity	Rate	Amount
	13.1.1	1:4 (1 cement: 4 fine sand) Providing and applying plactor of paris putty of 2	Sqm	1,712.11	294.85	5,04,815.63
6	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqiii	1,712.11	214.30	3,66,905.17
7	13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
	13.52.2	On concrete work	Sqm	1,712.11	198.40	3,39,682.62
8	13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture		151.20	191.40	28,939.68
9	15.3	Demolishing R.C.C. work manually/ by mechanical means includingstacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.		3.45	2,928.10	10,101.95
10	5.9	Centering and shuttering including strutting, propping etc. and removal of form for				
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	145.38	608.35	88,441.92
11	5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	10.85	10,185.05	1,10,507.79
12	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	5.22A.6	Thermo-Mechanically Treated bars of grade Fe- 500D or more.	kg	1,500.45	89.65	1,34,515.34
13	17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
	17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	each	20.00	5,540.55	1,10,811.00
14	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	each	10.00	3,392.85	33,928.50
15	11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	Sqm	20.00	633.60	12,672.00
16	17.13	Providing and fixing white vitreous china water closet squatting pan (Indian type) :				
	17.13.2	Orissa pattern W.C. pan of size 580x440 mm	each	8.00	2,758.20	22,065.60
17	17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
	17.32.2	Rectangular shape 453x357 mm	each	10.00	1,158.95	11,589.50

SI. No.	Item No.	Description of Itom	Unit	Ouppting	Data	Amount
		Description of Item Providing and fixing Chlorinated Polyvinyl Chloride	Unit	Quantity	Rate	Amount
18	18.8	(CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
		Concealed work, including cutting chases and making good the walls etc.				
	18.8.1	15 mm nominal dia Pipes	metre	30.00	441.15	13,234.50
	18.8.2	20 mm nominal dia Pipes	metre	45.00	513.75	23,118.75
	18.8.3	25 mm nominal dia Pipes	metre	120.00	626.05	75,126.00
19	26.38	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineerin- Charge Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument.				
	26.38.2	50mm thick in Grade M 25 with cement content not less than 330 kg per cum	Sqm	450.00	1,073.45	4,83,052.50
20	26.35	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/ masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in- Charge. (The payment shall be made on the basis of actual weight of approved grout injected.)				
	26.35.3	Epoxy injection grout in concrete/RCC work of	kg	500.00	793.25	3,96,625.00
21	11.41	approved make Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
	11.41.2	11.41.2 Size of Tile 600x600 mm ELECTRICAL	Sqm	322.06	1,416.65	4,56,244.75
22	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
T	1.10.3	Group C	point	260.00	990.00	2,57,400.00
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
23						
23	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	metre	350.00	146.00	51,100.00 75 150 00
23	1.14.1 1.14.2 1.14.3		metre metre metre	350.00 450.00 100.00	146.00 167.00 200.00	51,100.00 75,150.00 20,000.00 20,100.00

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
24	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	each	100.00	85.00	8,500.00
	1.24.3 1.24.4	15/16 A switch 3 pin 5/6 A socket outlet	each each	20.00 20.00	132.00 111.00	2,640.00 2,220.00
	1.24.5	6 pin 15/16 A socket outlet	each	10.00	175.00	1,750.00
25	19.1	Supply, Installation, Testing and Commissioning of		80.00	3,495.00	2,79,600.00
26	NS	1200 mm sweep,BLDC star rated ceiling fan. Supply, Installation, Testing and Commissioning of	each	160.00	565.00	90,400.00
20	113	18 W LED Batten Lights. Supplying and fixing two module stepped type		100.00	505.00	90,400.00
27	1.25	electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	each	80.00	342.00	27,360.00
28	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.5	8 Module (125mmX125mm)	each	15.00	383.00	5,745.00
29	1.27.6 NS	12 Module (200mmX150mm) Supplying including installation, commissioning of vernmin and dust proof totally enclosed cubical indoor type floor/wall mounting compartmentalize panel board of size 1.35M X I.5OMX 0.40M made of 16 SWG/L66 mm thick C.R. sheet and 3Smm X 35mm X Smm size angle having 4 no legs at the bottom complete painting with 2 coats of Red Oxide metal primer and 2 coats of enamel paint. The panel board is to be erected in 1:3:6 PCC foundation including brick soling / grouting etc. complete neatly Wiring done with provision for one no 125/160A 4pole MCCB or Switch Fuse Unit as incomer  and provision for 8nos DP or TPN out going as specified and directed by the deptt. confirming to IP 43 protection comprising of the following electrical items: 1. 20mm X 3mm 4 strip copper Bus-Bar 1.4 M length each 2. Digital 3 Phase Voltmeter Accuracy class 0.5 - 1 no 3. Digital 3 Phase Ammeter Accuracy class 0.5 -1 no 4. Pilot Lamp with integral ckt LED 110-230 V(R ed, Yellow,& Blue -3 no 5. Voltmeter & Ammeter Selector Switch -2 no 6. 2 A Slide fuse unit - 3nos (Incoming & Outgoing Switch Gear of reqd. rating		20.00	434.00	8,680.00
		will be measured and paid separately) 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources) Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB	each	1.00	38,269.00	38,269.00
30	2.4	distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required.				
	2.4.1	4 way (4 + 12), Double door	each	3.00	3,068.00	9,204.00
31	5.2	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	each	2.00	5,308.00	10,616.00
32	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	metre	30.00	131.00	3,930.00

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Providing and fixing following rating and breaking				
		capacity and pole MCCB, 30 KA 415V 50Hz 4P				
		MCCB (lcs=lcu, adjustable Ir setting 0.7) without				
33	2.1+2.2	enclosure of the following capacity complete with				
22	2.1+2.2	thermomagnetic release and terminal spreaders in				
		existing cubicle panel board including drilling holes				
		in cubicle panel, making connections, etc. as				
		required.				
	2.2.13	100 A,30KA,FPMCCB	each	2.00	7,377.00	14,754.00
34	2.1.2	63 A ,30KA,FPMCCB	each	8.00	2,923.00	23,384.00
	2.2.15	200 A,36KA,FPMCCB	each	2.00	15,149.00	30,298.00
		Supplying and fixing 5 A to 32 A rating, 240/415 V,				
		10 kA, "C" curve, miniature circuit breaker suitable				
35	2.10	for inductive load of following poles in the existing				
		MCB DB complete with connections, testing and				
		commissioning etc. as required.				
	2.10.1	Single pole	each	24.00	199.00	4,776.00
	2.10.3	Double pole	each	12.00	556.00	6,672.00
		Supplying and fixing suitable size GI box with				
		modular plate and cover in front on surface or in				
36	1.56	recess, including providng and fixing 2 nos. 3 pin	each	30.00	582.00	17,460.00
		5/6 A modular socket outlet and 2 nos. 5/6 A				
		modular switch, connections etc. as required.				
		Supplying and fixing following way, single pole and				
		neutral, sheet steel, MCB distribution board, 240 V,				
37	2.3	on surface/ recess, complete with tinned copper				
57	2.5	bus bar, neutral bus bar, earth bar, din bar,				
		interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
		etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.3	12 way, Double door	each	6.00	2,053.00	12,318.00
	2.3.4	16 way, Double door	each	6.00	2,453.00	14,718.00
	2.3.2	8 way , Double door	each	6.00	1,760.00	10,560.00
		Supply, Installation, Testing and Commissioning of				
38	NS	100 W, 450 mm Wall Fan	each	10.00	3,200.00	32,000.00
		(Havells/Bajaj/Crompton/V gard) with metal frame			,	,
		and button control complete as directed. Supply, Installation, Testing and Commissioning of				
39	NS	300 mm Exhaust Fan.	each	10.00	2,768.00	27,680.00
			-		Total = Rs.	61,58,755.00
					33% = Rs.	3,89,849.00
		-		Estimated		65,48,604.00
		Total Va	lue of	Work (Excl.	GST) = Rs.	55,49,664.00

#### Name of work: Estimate for Construction of shed with truss and Profile sheet over newly constructed Examination building block - II at Assam University Campus Silchar. ABSTRACT OF COST

Item No.	Description of Item	Unit	Quantity	Rate	Amount
15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	5.50	2,007.10	11,039.05
5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
5.22A.6	Thermo-Mechanically Treated bars of grade Fe- 500D or more.	kg	3,950.00	89.60	3,53,920.00
5.9	propping etc. and removal of form for				
5.9.6		Sqm	135.00	804.25	1,08,573.75
5.33	providing and haying in position ready initiated of site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
5.33.2	All works above plinth level upto floor V level				
5.33.2.1	content of 330 kg /cum	cum	16.46	10,080.15	1,65,919.27
5.35		quintal	13.17	688.45	9,066.89
10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped				
10.16.1	Hot finished welded type tubes	kg	8,020.00	154.90	12,42,298.00
12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to	Sqm	970.00	671.55	6,51,403.50
	15.2 15.21 5.22A 5.22A.6 5.9 5.9.6 5.9.6 5.33 5.33 5.33 5.33 10.16 10.16.1	Demolishing cement concrete manually/ by mechanical means including disposal of material Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)           5.21         Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)           Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.           5.22A.         Thermo-Mechanically Treated bars of grade Fe- 500D or more.           5.9         Centering and shuttering including strutting, propping etc. and removal of form for           5.9.6         Columns, Pillars, Piers, Abutments, Posts and Struts           Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.           5.33.2         All works above plinth level upto floor V level           5.33.2.1         Concrete of M25 grade with minimum cement conthet of 330 kg /cum           Add for u	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charae.           15.2.1         Norminal concrete 1:3:6 or richer mix (l/c equivalent design mix)         cum           Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.         s.22A.6           5.92A.6         Thermo-Mechanically Treated bars of grade Fe- 5.9         colo D or more.           5.9.1         Columns, Pillars, Piers, Abutments, Posts and Struts porping etc. and removal of form for 5.9.6         Sqm           Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portiand Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.           Note: Extra cement up to 10% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.           5.33.2.1         Concrete of M25 grade with minimum cement content of 330 kg /cum         cum           Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including ubying a priming coat of approved steel primer, including welding and bolted with special shaped wash	Demolishing cement concrete manually/ by mechanical means including disposal of material Nominal concrete 1:3:6 or richer mix (l/c equivalent design mix)         cum         5.50           15.2.1 Mominal concrete 1:3:6 or richer mix (l/c equivalent design mix)         cum         5.50           5.22A.6 Stredel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.         5.22A.6           5.22A.6 Stredel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.         5.9           5.9 Columns, Pillars, Piers, Abutments, Posts and Strutts Sqm         135.00           Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete, to improve durability and workability without impairing strength; including pumping of concrete. No time re-in-charge; for the following grades of oncrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.           5.33.2 All works above plinth level upto floor V level         5.33.2.1 Concrete of M25 grade with minimum cement content of	Demolishing cement concrete manually/ by mithin 50 metres lead as per direction of Engineer- in-chance.         unitable concrete 1:3:6 or incher mix (//c equivalent discipation)           15.2.1         Nominal concrete 1:3:6 or incher mix (//c equivalent discipation)         cum         5.50         2,007.10           5.22A         Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.         cum         5.50         2,007.10           5.22A         Thermo-Mechanically Treated bars of grade Fe- Song Centering and shuttering including strutting, providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse agregate and fine agregate derived from for         Sqm         135.00         804.25           Providing and laying in position ready mixed or site batched design matcreates in recommende proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impaing strengty, including pumging of concrete to site of laying, curing, carriage for all leads; but excluding the cost of entering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.         16.46         10,080.15           5.33.2         All works above plinth level upto floor V level 5.33.2.1         Concrete of M25 grade with minimum cement content of 330 kg /cum         13.17         688.45           Therein.         Seel work in built up tubular (round, square or nectangular hollow tubes etc.) trusses etc., includ

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
8	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :				
	12.51.1	Ridges plain (500 - 600mm)	metre	30.00	450.60	13,518.00
9		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	Sqm	300.00	131.45	39,435.00
	Total = Rs.					25,95,173.00
	GST @ 6.33% = Rs.					1,64,274.00
	Estimated Total = Rs.				27,59,447.00	
	Total Value of Work (Excl. GST) = Rs.				23,38,514.00	

#### ABSTRACT OF COST

Name of work: External painting works with Acrylic smooth exterior paint along with some minor repairing of external damaged wall, PVC rain water pipe, window glass,window stay and handle,outside door repairing / changing etc at different location of department building at Assam University Silchar Campus.

SI.	Name of the Building	Amount (Excl. GST)		
No.				
1	Political Science, History & Sociology Building	4,35,339.00		
2	Earth Science Building	2,92,529.00		
3	Library & Information Science Building	2,31,045.00		
4	Mathematics Building	2,43,130.00		
5	Computer Science Building	3,43,668.00		
6	Chemistry Building	4,46,425.00		
7	Physics Building	4,30,120.00		
8	Ecology Building	4,30,120.00		
9	Life Science Building	4,30,120.00		
10	Biotechnology Building	2,01,029.00		
11	Microbiology Building	2,59,336.00		
12	Law Department Building	2,61,584.00		
13	Social work Building	7,39,422.00		
14	Philosophy Building	2,98,300.00		
15	English & Foreign Language Building	4,96,955.00		
16	Academic Building (Bengali, Hindli & Sanskrit)	4,47,214.00		
17	Fine Arts & Miscommunication Building	5,32,563.00		
18	Old Guest House Building	3,93,923.00		
19	Boys Hostel No. 2 Building	3,23,790.00		
20	Boys Hostel No. 1 Building	5,25,040.00		
21	Girls Hostel No. 1 Building	7,53,730.00		
22	Student Community Centre Building	2,05,274.00		
23	Central Library & Computer Centre Building	7,63,395.00		
24	Women's Day Care Building	2,20,732.00		
25	Health Centre Building	2,00,764.00		
26	Administrative Building	8,59,591.00		
	Total = Rs.	1,07,65,138.00		

#### Name of work: External painting & minor repairing works for Political Science, History & Sociology Building at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,700.00	108.60	2,93,220.00
		sqm) over existing cement paint surface Removing white or colour wash by scrapping and				
		sand papering and preparing the surface smooth				
2	13.88	including necessary repairs to scratches etc.		1,250.00	16.35	20,437.50
		complete		,		-,
		complete				
		Providing and applying white cement based putty of				
-		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	170.00	123.85	21,054.50
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give an				
		even shade :				
	13.99.1	One or more coats on old work	Sqm	1,345.36	86.55	1,16,440.91
		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	15.00	941.95	14,129.25
6	13.2	15 mm cement plaster on the rough side of single or				
6	13.2	half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	55.00	324.30	17,836.50
Total = Rs.						4,83,118.66
GST @ 6.33% = Rs.					30,581.00	
Estimated Total = Rs.					5,13,699.66	
Total Value of Work (Excl. GST) = Rs.					4,35,339.00	

#### Name of work: External painting & minor repairing works for Earth Science building at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,260.14	108.60	2,45,451.20
		sam) over existing cement paint surface		_,		_, ,
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	850.00	16.35	13,897.50
		including necessary repairs to scratches etc.	-			
		complete Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
	10.00	manufacturer, over the plastered wall surface to			100.05	
3	13.80	prepare the surface even and smooth complete.	Sqm	115.00	123.85	14,242.75
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	503.57	86.55	43,583.98
		Renewing glass panes, with putty and nails	-			
5	14.5	wherever necessary including racking out the old				
5	14.5	putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	7.92	941.95	7,460.24
					Total = Rs.	3,24,635.68
					33% = Rs.	20,549.00 3,45,184.68
	Estimated Total = Rs.					
		Total Val	lue of V	Nork (Excl. 0	GST) = Rs.	2,92,529.00

### Name of work: External painting & minor repairing works for Library Science Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	1,560.14	108.60	1,69,431.20
	15111211	sgm) over existing cement paint surface	Sqiii	1,500111	100.00	1,00,101120
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sam	800.00	16.35	13,080.00
		including necessary repairs to scratches etc.				-,
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	85.00	123.85	10,527.25
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	664.49	86.55	57,511.61
	15.55.1			004.45	00.55	57,511.01
		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
	-	putty:				
	1451	Float glass panes of nominal thickness 4 mm	<b>C</b>	6.21	0.4.1.05	F 0F2 10
	14.5.1	(weight not less than 10kg/sqm)	Sqm	6.21	941.95	5,853.18
		<u>.</u>	<b>ا</b> ــــــــــــــــــــــــــــــــــــ		Total = Rs.	2,56,403.24
				GST @ 6.3	33% = Rs.	16,230.00
				Estimated T	otal = Rs.	2,72,633.24
		Total Va	lue of V	Nork (Excl. (	GST) = Rs.	2,31,045.00

### Name of work: External painting & minor repairing works for Mathematics Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount	
		Finishing walls with Premium Acrylic Smooth					
1	13.112	exterior paint with Silicone additives of required					
		shade					
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	Sqm	1,740.58	108.60	1,89,026.99	
		Removing white or colour wash by scrapping and					
		sand papering and preparing the surface smooth					
2	13.88	including necessary repairs to scratches etc.	Sqm	950.00	16.35	15,532.50	
		complete					
		Providing and applying white cement based putty of					
		average thickness 1 mm, of approved brand and					
3	13.80	manufacturer, over the plastered wall surface to	Sam	85.00	123.85	10,527.25	
-		prepare the surface even and smooth complete.					
		Painting with synthetic enamel paint of approved					
4	13.99	brand and manufacture of required colour to give					
		an even shade :					
	13.99.1	One or more coats on old work	Sam	485.40	86.55	42,011.37	
		Description along any with with and with				,	
5	14.5	Renewing glass panes, with putty and nails					
5	14.5	wherever necessary including racking out the old putty:					
		Float glass panes of nominal thickness 4 mm					
	14.5.1	(weight not less than 10kg/sqm)	Sqm	13.50	941.95	12,716.33	
					Total = Rs.	<u>2,69,814.43</u> 17,079.00	
	GST @ 6.33% = Rs.						
	Estimated Total = Rs. Total Value of Work (Excl. GST) = Rs.						
L			iue of V	WOIK (EXCI. C	331) - KS.	2,43,130.00	

### Name of work: External painting & minor repairing works for Computer Science Building at Assam University Ca

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,236.16	108.60	2,42,846.98
		sqm) over existing cement paint surface Removing white or colour wash by scrapping and	-			
		sand papering and preparing the surface smooth				
2	13.88	including necessary repairs to scratches etc.	Sqm	750.00	16.35	12,262.50
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	m 125.00	00 123.85	15,481.25
-		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sam	836.10	86.55	72,364.46
		Denowing glass paper with putty and pails				,
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old				
5	11.5	putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	40.80	941.95	38,431.56
					Total = Rs.	3,81,386.74
					33% = Rs.	24,142.00
				Estimated 1		4,05,528.74
		Total Val	lue of \	Nork (Excl. 0	GST) = Rs.	3,43,668.00

### Name of work: External painting & minor repairing works for Chemistry Building at Assam University Campus Silcl

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,925.24	108.60	3,17,681.06
		som) over existing cement paint surface				
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	860.00	16.35	14,061.00
		including necessary repairs to scratches etc.				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sam	135.00	123.85	16,719.75
5	15.00	prepare the surface even and smooth complete.	Sqiii	155.00	125.05	10,719.75
4	13.99	Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give an even shade :				
		One or more coats on old work				
	13.99.1		Sqm	1,051.50	86.55	91,007.33
		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty:				
		Float glass panes of nominal thickness 4 mm	Com	F0 40	041.05	
	14.5.1	(weight not less than 10kg/sqm)	Sqm	59.40	941.95	55,951.83
	1		l I		Total = Rs.	4,95,420.97
	GST @ 6.33% = Rs.					
	Estimated Total = Rs.					
		Total Va	lue of <b>\</b>	Nork (Excl. 0	GST) = Rs.	4,46,425.00

#### Name of work: External painting & minor repairing works for Physics Building at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,760.84	108.60	2,99,827.22
		sqm) over existing cement paint surface	•	,		
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	885.00	16.35	14,469.75
		including necessary repairs to scratches etc.				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to		125.00	122.05	
2	13.80	prepare the surface even and smooth complete.	Sqm	135.00	123.85	16,719.75
	10.00	Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade : One or more coats on old work				
	13.99.1		Sqm	927.33	86.55	80,260.41
		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		puttv:				
		Float glass panes of nominal thickness 4 mm	~	70.10	0.4.4.65	66.046.50
	14.5.1	(weight not less than 10kg/sqm)	Sqm	70.12	941.95	66,049.53
	1				Total = Rs.	4,77,326.67
					33% = Rs.	30,215.00
				Estimated 1		5,07,541.67 4,30,120.00
	Total Value of Work (Excl. GST) = Rs.					

# Name of work: External painting & minor repairing works for Ecology Building at Assam University Campus Silchar.

ABSTRACT C	OF COST
------------	---------

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
1	13.112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	Sqm	2,760.84	108.60	2,99,827.22
2	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	885.00	16.35	14,469.75
3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		135.00	123.85	16,719.75
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.99.1	One or more coats on old work	Sqm	927.33	86.55	80,260.41
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sqm	70.12	941.95	66,049.53
					Total = Rs.	4,77,326.67 30,215.00
	GST @ 6.33% = Rs.					
	Estimated Total = Rs.					
	Total Value of Work (Excl. GST) = Rs.					

### Name of work: External painting & minor repairing works for Life Science Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount	
		Finishing walls with Premium Acrylic Smooth					
1	13.112	exterior paint with Silicone additives of required					
		shade					
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	2,760.84	108.60	2,99,827.22	
		sqm) over existing cement paint surface Removing white or colour wash by scrapping and		-			
		sand papering and preparing the surface smooth					
2	13.88	including necessary repairs to scratches etc.	Sqm	885.00	16.35	14,469.75	
		complete					
		Providing and applying white cement based putty of					
		average thickness 1 mm, of approved brand and					
3	13.80	manufacturer, over the plastered wall surface to	Sam	135.00	123.85	16,719.75	
		prepare the surface even and smooth complete.	•			,	
		Painting with synthetic enamel paint of approved					
4	13.99	brand and manufacture of required colour to give					
		an even shade :					
	13.99.1	One or more coats on old work	Sqm	927.33	86.55	80,260.41	
		Renewing glass panes, with putty and nails					
5	14.5	wherever necessary including racking out the old					
5	1113	putty:					
		Float glass panes of nominal thickness 4 mm					
	14.5.1	(weight not less than 10kg/sqm)	Sqm	70.12	941.95	66,049.53	
	ļ				Total = Rs.	4,77,326.67	
	GST @ 6.33% = Rs.						
				Estimated 1		5,07,541.67 4,30,120.00	
	Total Value of Work (Excl. GST) = Rs.						

# Name of work: External painting & minor repairing works for Bio Technology Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sam	1,379.99	108.60	1,49,866.91
		sqm) over existing cement paint surface	- <b>4</b>	_,		_,,
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	580.00	16.35	9,483.00
		including necessary repairs to scratches etc.	-			
		complete Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
		manufacturer, over the plastered wall surface to	-			
3	13.80	prepare the surface even and smooth complete.	Sqm	115.00	) 123.85	14,242.75
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	384.18	86.55	33,250.78
	10.55.1		99		00.00	00,2001/0
_	14 5	Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty: Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sgm)	Sam	17.25	941.95	16,248.64
	1		Sqiii	17.25	5 11.55	10,240.04
					Total = Rs.	2,23,092.08
	14,122.00					
				Estimated 1	Total = Rs.	2,37,214.08
		Total Va	lue of \	Work (Excl. 0	GST) = Rs.	2,01,029.00

# Name of work: External painting & minor repairing works for Micrbiology Building at Assam University Campus Silchar.

ABSTRACT	OF COST
----------	---------

SI. No.	Item No.		Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sam	1,905.29	108.60	2,06,914.49
-	1011111	sgm) over existing cement paint surface		1,500125	100.00	2,00,02
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	800.00	16.35	13,080.00
		including necessary repairs to scratches etc.	•			,
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	125.00	123.85	15,481.25
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	308.18	86.55	26,672.98
	15.55.1		•	500.10	00.55	20,072.50
_		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty:				
	14 5 1	Float glass panes of nominal thickness 4 mm	Carro	27.23	0.41.05	25 640 20
	14.5.1	(weight not less than 10kg/sqm)	Sqm	27.23	941.95	25,649.30
	1	1			Total = Rs.	2,87,798.02
	GST @ 6.33% = Rs.					
	Estimated Total = Rs.					
		Total Val	lue of \	Nork (Excl. 0	GST) = Rs.	2,59,336.00

### Name of work: External painting & minor repairing works for Law Building at Assam University Campus Silchar.

SI. No.	Item No.		Unit	Quantity	Rate	Amount
_		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade Old work (Two or more coats applied @ 1.43 ltr/ 10				
	13.112.1	sgm) over existing cement paint surface	Sqm	1,798.56	108.60	1,95,323.62
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	809.35	16.35	13,232.87
		including necessary repairs to scratches etc. complete				,
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	120.00	123.85	14,862.00
-		prepare the surface even and smooth complete.				,
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade : One or more coats on old work				
	13.99.1		Sqm	403.45	86.55	34,918.60
		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty: Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sgm)	Sqm	12.38	941.95	11,661.34
		Providing and laying in position cement concrete of				
6	4.1	specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
		1:3:6 (1 Cement : 3 coarse sand (zone-III) derived				
	4.1.5	from natural sources : 6 graded stone aggregate 20	Cum	2.97	6,833.40	20,295.20
		mm nominal size derived from natural sources)				
					Total = Rs.	2,90,293.63
<u>GST @ 6.33% = Rs.</u> Estimated Total = Rs.						<u>18,376.00</u> 3,08,669.63
		Total Va	lue of \	Work (Excl. 0		2,61,584.00

# Name of work: External painting & minor repairing works for Social work Building at Assam University Campus Silchar.

ABSTRACT	OF	COST
//	•••	

admin (over existing center) pairs by scrapping and sensoring white or colour white sensorin including and appering and preparing the surface smooth including and applying white cenent based puty of average thickness 1 mm, of approved brand and murfacturer, over the plastered wall surface to prepare the surface even and smooth complete.         Sam         1,293.72         16.35         21,152.3.           4         13.80         Providing and applying white cenent based puty of average thickness 1 mm, of approved brand and murfacturer, over the plastered wall surface to prepare the surface even and smooth complete.         Sam         120.00         123.85         14,862.0           4         13.99         Painting with synthetic enamel paint of approved an even shade :         Sam         1,061.40         86.55         91,864.1           5         14.5         Renewing glass panes, with putty and nails wherever necessary including racking out the oid autiver         Sam         15.00         941.95         32,968.2           6         4.1         Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :         Sam         130.00         324.30         51,182.1           7         13.2         15 full centerit 2 for acres and (zone=III) derived from natural size derived from natural sources)         Sam         130.00         324.30         42,159.0           7         13.2         15 for intermit plaster on the rough side of si	SI. No.	Item No.		Unit	Quantity	Rate	Amount
Instance         Instance         Instance         Instance           13.112.1         Jold work (Two or more coats applied @ 1.43 triat         Jogm         3,234,32         108.60         3,51,247.11           2         13.88         sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete         Sqm         1,293.72         16.35         21,152.3           3         13.80         marrage thickness 1 mm, of approved brand and marriacturer, over the plastered wall surface to prepare the surface even and smooth complete.         Sqm         120.00         123.85         14,862.0           4         13.99         Painting with synthetic enamel paint of approved prepare the surface even and smooth complete.         Sqm         120.00         123.85         14,862.0           5         14.5         Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:         Sqm         120.00         123.85         91,864.1           6         4.1         Renewing with glass panes, with putty and nails wherever necessary including racking out the old putty:         Sqm         35.00         941.95         32,966.2           7         13.2         IS3.61         Renewing with synthetic ename pairs end (cone-III) derived from natural sources : 6 graded stone aggregate 20         Cum         7.49         6,833.40         51,182.11 <td>1</td> <td>13 112</td> <td></td> <td></td> <td></td> <td></td> <td></td>	1	13 112					
111111       Somi over existing cement pairt surface       3/01       3/21.24.2       100.05       3/21.24.2         2       13.88       Removing white or colour wash by scrapping and sincluding necessary repairs to scratches etc. comulate       5/01.24.21.22.3       11.293.72       16.35       21.152.3         3       13.80       and papering and pplying white cement based putly of average thickness 1 mm, of approved brand and monotacture over the plastered wall surface to prepare the surface even and smooth complete.       Sqm       120.00       123.85       14,862.0         4       13.99       Painting with synthetic enamel paint of approved brand and multifacture of required colour to give an even shade :       Sqm       1,061.40       86.55       91,864.1         5       14.5       Renewing glass panes, with putty and mails wherever necessary including racking out the old putty.       Sqm       35.00       941.95       322,968.21         6       4.1       Providing and laying in position cement concrete of sqm       Sqm       130.00       324.30       51,182.11         7       13.2       15 from natural sources : 6 graded stone aggregate 20       Cum       7.49       6,833.40       51,182.11         8       15.2       15.61 Gement : 3 corase sand (cone-III) derived in a chard wide of mix.       Sqm       130.00       324.30       42,159.01         9	1	13.112	shade				
2     13.88     Removing white or colour wash by scrapping and preparing the surface smooth including necessary repairs to scratches etc. commeter or manifered applying white cement based puty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to Sqm     1,293.72     16.35     21,152.33       3     13.80     Providing and applying white cement based puty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to Sqm     120.00     123.85     14,862.00       4     13.99     Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :     Sqm     1,061.40     86.55     91,864.17       5     14.5     Renewing glass panes, with putty and nails wherever necessary including racking out the oid wherever necessary including racking out the oid subtracting - All work up to plinth level :     Sqm     35.00     941.95     32,968.27       6     4.1     13:6 (1 Cement : 3 coarse sand (zone-III) derived solution in an autoral size derived from natural Sources)     Sqm     130.00     324.30     42,152.01       7     13.2     15 form natural sources : 6 graded stone aggregate 20     Cum     7.49     6,833.40     51,182.11       8     15.2     16 (1 cement concrete manually/ by mechanical means including disposal of material sources)     Sqm     130.00     324.30     42,159.01       9     15.7     In cement plastron the rough side of single or half brick w		13.112.1		Sqm	3,234.32	108.60	3,51,247.15
2     13.88     sand papering and preparing the surface smooth set. romalete     Sqn     1,293.72     16.35     21,152.33       3     13.80     prepare the surface terment based putty of average thickness 1 mm, of approved brand and manufacture, over the plastered will surface to prepare the surface even and smooth complete.     Sqn     120.00     123.85     14,862.00       4     13.99     Painting with synthetic enamel paint of approved to give an even shade :     Sqn     1,061.40     86.55     91,864.11       5     14.5     Renewing glass panes, with putty and nalis wherever necessary including racking out the old nutty:     Sqn     35.00     941.95     322,968.21       6     4.1     Providing and laying in position comment concrete of specified grade acculuing the cost of centering and shutering - All work up to plinth level:     Sqn     35.00     941.95     322,968.21       7     13.2     15 from natural sources : 6 graded stone aggregate 20 Cum     7.49     6,833.40     51,182.11       8     13.2.16 (1 cement : 6 free and/ty of spingle cont of centering and shutering - All work up to plinth level :     Sqm     130.00     324.30     42,159.00       7     13.2     15 from natural sources : 6 graded stone aggregate 20 Cum     7.49     6,833.40     51,182.11       9     15.7     Incernet plaster or other rough side of single or half brick wall of mix :     Sqm     130.00     324.							
10       including necessary repairs to scratches etc.       1 <t< td=""><td>2</td><td>13.88</td><td>sand papering and preparing the surface smooth</td><td>Sam</td><td>1.293.72</td><td>16.35</td><td>21,152.32</td></t<>	2	13.88	sand papering and preparing the surface smooth	Sam	1.293.72	16.35	21,152.32
a         Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.         Sqm         120.00         123.85         14,862.00           4         13.99         Painting with synthetic enamel paint of approved an even shade : an even shade : an even shade : 13.99.1         Sqm         1,061.40         86.55         91,864.1           5         14.5         Renewing glass panes, with putty and nails wherever necessary including racking out the old nutty:         Sqm         35.00         941.95         32,968.2           6         4.1         Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:         Sqm         35.00         941.95         32,968.2           7         13.2         15 fm meturi 3 coarses and (zone-III) derived specified grade excluding the cost of centering and shuttering - All work up to plinth level:         Sqm         130.00         324.30         42,159.00           7         13.2         15 fm meturi 13 coarse including disposal of material and disposal of unserviceable material with 50 metres lead as per direction of Engineer- inharne         Sqm         130.00         324.30         42,159.00           8         15.2.1         fm metarial surface to right for the maxil by metarial and disposal of unserviceable material within 50 metres lead as per directio					_,		
3       13.80       manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.       Sqm       120.00       123.85       14,862.00         4       13.99       Painting with synthetic enamel paint of approved an even shade:       Sqm       1,061.40       86.55       91,864.11         5       14.5       Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:       Sqm       35.00       941.95       322,968.21         6       4.1       Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinh level :       Sqm       35.00       941.95       322,968.21         7       13.2       15 mm cement plaster on the rough side of single or half brick wall of mix i:       Sqm       130.00       324.30       42,159.00         8       15.2       1.6 (1 cement: 6 fine sand)       Sqm       130.00       324.30       42,159.00         9       15.2       Demolishing cernet concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-the-charace       Cum       4.20       2,007.10       8,429.80         9       15.7       In cement motar       Cum       3.75       1,698.45       6,369.11         10       sgm mix)       In cement motar			Providing and applying white cement based putty of				
3       13.00       prepare the surface even and smooth complete.       34,11       120.00       123.00       123.00       124.10       124.00       124.10       126.00       124.10       126.00       124.10       126.00       124.10       126.00       124.10       126.00       124.10       126.00       126.00       126.00       126.00       126							
4       13.99       Painting with synthetic enamel paint of approved prand and manufacture of required colour to give an even shade:       5         13.99.1       One or more coats on old work       Sqm       1,061.40       86.55       91,864.1'         5       14.5       Renewing glass panes, with putty and nails wherever necessary including racking out the old putty.       5       94.1.95       32,968.2'         6       4.1       Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)       Sqm       35.00       941.95       32,968.2'         6       4.1       specified grade excluding the cost of centering and shuttering - All work up to plinth level :       5       13.22       15.36 (1 Cennet : 3 coarse sand (20ne-III) derived from natural sources ) and moninal size derived from natural sources 2       Cum       7.49       6,833.40       51,182.1'         7       13.2       15.36 (1 Cennet : 6 fine sand)       Sgm       130.00       324.30       42,159.0'         8       15.2       15.1       Demolishing cennet concrete manually/ by mechanical means including disposal of material and disposal of unserviceable material within 50       Cum       4.20       2,007.10       8,429.8'         9       15.7       In cement mortar       Cum	3	13.80		Sqm	120.00	123.85	14,862.00
4       13.99       brand and manufacture of required colour to give an even shade ::							
4       13.99       brand and manufacture of required colour to give an even shade ::			Painting with synthetic enamel paint of approved				
13.99.1     One or more coats on old work     Sqm     1,061.40     86.55     91,864.1       5     14.5     Renewing glass panes, with putty and nails wherever necessary including racking out the old putty.     Sqm     35.00     941.95     32,968.21       6     14.5.1     Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)     Sqm     35.00     941.95     32,968.21       6     4.1     Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :     Cum     7.49     6,833.40     51,182.11       7     13.20     115 mm cement plaster on the rough side of single or half brick wall of mix :     Sqm     130.00     324.30     42,159.00       8     15.2     116.1     Cementi 6 fme sand)     Sqm     130.00     324.30     42,159.00       9     15.7     Demolishing cement concrete manually/ by mechanical means including disposal of material and disposal of unserviceable material and disposal of uns	4	13.99	brand and manufacture of required colour to give				
13.99.1       Sqm       1,061.40       36.35       91,864.1         5       14.5       Renewing glass panes, with putty and naisg       1,061.40       36.35       91,864.1         5       14.5       Float glass panes of nominal thickness 4 mm       Sqm       35.00       941.95       32,968.21         6       4.1       Float glass panes of nominal thickness 4 mm       Sqm       35.00       941.95       32,968.21         6       4.1       Specified grade excluding the cost of centering and shuttering - All work up to pinth level :       113.6 (1 Cement : 3 coarse sand (zone-III) derived       Cum       7.49       6,833.40       51,182.11         7       13.2       15 mm cement plaster on the rough side of single or half brick wall of mix :       Sqm       130.00       324.30       42,159.01         8       15.2       mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charne.       Sqm       130.00       324.30       42,159.01         9       15.7.1       In cement plaster on the rough side of single or half brick wall of mix :       Sqm       130.00       324.30       42,159.01         9       15.2.1       Demolishing cemet concrete manually/ by mechanical means including stracking of serviceable material within 50 metres lead as per direction of Engineer - in - charne.       Sqm       <			an even shade : One or more costs on old work				
5       14.5       wherever necessary including racking out the old nutty:       Image: Constraint of the second		13.99.1		Sqm	1,061.40	86.55	91,864.17
14.5.1       Introduction of the second of the	E	1 <i>4</i> E					
14.5.1Float glass panes of nominal thickness 4 mm (wight not less than 10kg/sqm)Sqm35.00941.95332,968.2164.1Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : <td>5</td> <td>14.5</td> <td></td> <td></td> <td></td> <td></td> <td></td>	5	14.5					
1       1			Float glass panes of nominal thickness 4 mm	_			
6       4.1       specified grade excluding the cost of centering and shuttering - All work up to plinth level :  <		14.5.1	(weight not less than 10kg/sqm)	Sqm	35.00	941.95	32,968.25
0       4.1       shuttering - All work up to plinth level :       1         1:3:6 (1 Cement : 3 coarse sand (zone-III) derived       1:3:6 (1 Cement : 3 coarse sand (zone-III) derived       7         4.1.5       from natural sources : 6 graded stone aggregate 20       Cum       7.49       6,833.40       51,182.1:         7       13.2       15 mm cement plaster on the rough side of single or half brick wall of mix :       5       324.30       42,159.01         8       15.2       116 (1 cement : 6 fine sand)       Sqm       130.00       324.30       42,159.01         8       15.2       115 (1 cement : 6 fine sand)       Sqm       130.00       324.30       42,159.01         8       15.2       15.6 (1 cement : 6 fine sand)       Sqm       130.00       324.30       42,159.01         8       15.2       15.6 or richer mix (i/c equivalent idigo sal of material within 50 metres lead as per direction of Engineer - non-charae       Cum       4.20       2,007.10       8,429.81         9       15.7       In cement mortar       Cum       3.75       1,698.45       6,369.11         10       2.8       mand disposal of userviceable material within 50 metres lead as per direction of Engineer - non 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including ressing of sides and ramming of bottoms, lift upto 1.5 m, inclu							
1:3:6 (1 Cement : 3 coarse sand (zone-III) derived 4.1.571:3:6 (1 Cement : 3 coarse sand (zone-III) derived mm nominal size derived from natural sources)711:215 mm cement plaster on the rough side of single or half brick wall of mix :5gm130.00324.3051,182.1'13:2.116 (1 cement : 6 fine sand)5gm130.00324.3042,159.0'815.216 (1 cement : 6 fine sand)5gm130.00324.3042,159.0'815.2Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charceCum4.202,007.108,429.8'915.7Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.Cum3.751,698.456,369.1'1015.7.4In cement mortar means including stacking of serviceable material within 20 mortarial means infoundation trenches or drains (not exceeding 1.5 m in width or 10 sgm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.2.814,758.4'115.9Centering and shuttering including strutting, propoling etc. and removal of form for mass concreteSqm13.71307.954,221.9'126.1modular) bricks of class designation 7.5 in foundation and plinth in:1.5 sinSqm13.71307.95	6	4.1					
4.1.5from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)Cum7.496,833.4051,182.11713.215 mm cement plaster on the rough side of single or half brick wall of mix :Sqm130.00324.3042,159.01813.2.21:6 (1 cement: 6 fine sand)Sqm130.00324.3042,159.01815.2mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charaeSqm130.00324.3042,159.01915.2.1Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)Cum4.202,007.108,429.81915.7Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material and disposal of surplus excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of S0 m.Sum51.45286.8514,758.4*115.9Centering and shuttering including strutting, propping etc. and removal of form for mass concreteCum51.45286.8514,758.4*126.1modulario, fordings, bases of columns, etc. for mass concreteSqm <td></td> <td></td> <td>shuttering - All work up to plinth level :</td> <td></td> <td></td> <td></td> <td></td>			shuttering - All work up to plinth level :				
mm nominal size derived from natural sources)nm nominal size derived from natural sources)713.215 mm cement plaster on the rough side of single or haff brick wall of mix :13.2.21:6 (1 cement: 6 fine sand)Sqm13.2.21:6 (1 cement: 6 fine sand)Sqm15.2mechanical means including disposal of material within 50 metres lead as per direction of Engineer- in - charneCum15.2.1design mix)Cum4.202,007.108,429.81915.7and disposal of unserviceable material means including stacking of serviceable material metres lead as per direction of Engineer- in charge.115.7.4In cement mortarCum15.7.4In cement mortarCum102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation raming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.102.8.1All kinds of soil.Cum51.45286.8514,758.41115.9Centering and shuttering including strutting, propoing etc. and removal of form for mass concreteSqm13.71126			1:3:6 (1 Cement : 3 coarse sand (zone-III) derived				
7       13.2       15 mm cement plaster on the rough side of single or half brick wall of mix :       5qm       130.00       324.30       42,159.00         8       15.2       16 (1 cement: 6 fine sand)       5qm       130.00       324.30       42,159.00         8       15.2       Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge       130.00       324.30       42,159.00         9       15.7       Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in charge.       Cum       4.20       2,007.10       8,429.80         9       15.7       In cement mortar       Cum       3.75       1,698.45       6,369.19         10       2.8       In cement mortar       Cum       3.75       1,698.45       6,369.19         10       2.8       In kinds of soil.       Cum       5.1.45       286.85       14,758.41         11       5.9       Centering and shuttering including strutting, propping etc. and removal of form for 5.9.1       Foundations, footings, bases of columns, etc. for mass concrete       Sqm       13.71       307.95       4,221.91         12       6.1       Brick work with common burnt clay F.P.S. (non modula		4.1.5	from natural sources : 6 graded stone aggregate 20	Cum	7.49	6,833.40	51,182.17
7       13.2       or half brick wall of mix :							
13.2.21:6 (1 cement: 6 fine sand)Sqm130.00324.3042,159.01815.2Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer- in - charce.Image: Concrete 1:3:6 or richer mix (i/c equivalent design mix)Cum4.202,007.108,429.81915.7Demolishing brick work manually/ by mechanical means including stacking of serviceable material ametres lead as per direction of Engineer- in - charce.Cum4.202,007.108,429.81915.7In cement mortarCum3.751,698.456,369.191015.7.4In cement mortarCum3.751,698.456,369.19102.8In cement mortarCum3.751,698.456,369.19102.8All kinds of soil.Cum51.45286.8514,758.41115.9Centering and shuttering including strutting, proping etc. and removal of form for mass concreteCum51.45286.8514,758.41126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.91	7	13.2					
8       15.2       mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in charace       Image: Second		13.2.2		Sqm	130.00	324.30	42,159.00
b       1.5.2       within 50 metres lead as per direction of Engineer - in - charge.         in - charge.       Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)       Cum       4.20       2,007.10       8,429.8:         9       15.7       Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.       In cement mortar       Cum       3.75       1,698.45       6,369.19         15.7       In cement mortar       Cum       3.75       1,698.45       6,369.19         10       2.8       Earth work in excavation by mechanical means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.       Cum       51.45       286.85       14,758.4:         11       5.9       Centering and shuttering including strutting, propping etc. and removal of form for       Sqm       13.71       307.95       4,221.9         12       6.1       Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:       Sqm       13.71       307.95       4,221.9							
in - chargeImage: Second s	8	15.2					
15.2.1design mix)Cum4.202,007.108,429.83915.7Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.Image: Common Serviceable material metres lead as per direction of Engineer-in charge.Image: Common Serviceable material metres lead as per direction of Engineer-in charge.15.7.4In cement mortarCum3.751,698.456,369.19102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Sender SenderSender Sender2.8.1All kinds of soil.Cum51.45286.8514,758.42115.9Centering and shuttering including strutting, propping etc. and removal of form for mass concreteSeq13.71307.954,221.99126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:SeqSeq13.71307.954,221.99			in - charge.				
915.7Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.Cum3.751,698.456,369.1915.7In cement mortarCum3.751,698.456,369.19102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propping etc. and removal of form forCum51.45286.8514,758.43126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.99		15.2.1			4.20	2,007.10	8,429.82
915.7means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.115.7In cement mortarCum3.751,698.456,369.1410In cement mortarCum3.751,698.456,369.14102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propping etc. and removal of form for mass concreteCum51.45286.8514,758.43126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.94		_			-	,	-,
915.7and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.Cum3.751,698.456,369.1915.7.4In cement mortarCum3.751,698.456,369.19102.8Earth work in excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propoind etc. and removal of form for mass concreteCum51.45286.8514,758.43126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.94							
1015.7.4In cement mortarCum3.751,698.456,369.191015.7.4Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Image: Cum with the second disposal of surplus excavated soil as directed, within a lead of 50 m.Image: Cum with the second disposal of surplus excavated soil as directed, within a lead of 50 m.115.9Centering and shuttering including strutting, propoing etc. and removal of form forCum with the second disposal of surplus excavated soil as directed, within a lead of 50 m.Sqm with the second disposal of surplus excavated soil as directed, within a lead of so m.126.1Foundations, footings, bases of columns, etc. for modular) bricks of class designation 7.5 in foundation and plinth in:Sqm with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:	9						
15.7.4Cum3.751,698.456,369.11102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.41115.9Centering and shuttering including strutting, propping etc. and removal of form forCum51.45286.8514,758.41126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.91			metres lead as per direction of Engineer-in charge.				
102.8Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.4:115.9Centering and shuttering including strutting, propping etc. and removal of form forCum51.45286.8514,258.4:126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.94		1574	In cement mortar	Cum	2 75	1 609 15	6 360 10
102.8(Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.LLL		13.7.4	Earth work in availation by machanical man		5.75	1,090.43	0,309.19
102.8trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propping etc. and removal of form forCum51.45286.8514,758.43115.9Centering and shuttering including strutting, propping etc. and removal of form forSqm13.71307.954,221.94126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Sqm13.71307.954,221.94			,				
102.8ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.1011<			trenches or drains (not exceeding 1.5 m in width or				
Image: a constraint of the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propring etc. and removal of form forCum51.45286.8514,758.43115.9Foundations, footings, bases of columns, etc. for mass concreteSqm13.71307.954,221.99126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Image: Concrete of the second	10	2.8					
surplus excavated soil as directed, within a lead of 50 m.CumSecond State2.8.1All kinds of soil.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, propping etc. and removal of form forCum51.45286.8514,758.435.9.1Foundations, footings, bases of columns, etc. for mass concreteSqm13.71307.954,221.94126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:LLL							
2.8.1All kinds of soil.Cum51.45286.8514,758.43115.9Centering and shuttering including strutting, proping etc. and removal of form forCum51.45286.8514,758.435.9.1Foundations, footings, bases of columns, etc. for mass concreteSqm13.71307.954,221.99126.1Brick work with common burnt clay F.P.S. (non foundation and plinth in:Sqm13.71Sqm13.71			surplus excavated soil as directed, within a lead of				
115.9Centering and shuttering including strutting, propping etc. and removal of form forImage: Constraint of the strutting including strutting, propping etc. and removal of form for5.9.1Foundations, footings, bases of columns, etc. for mass concreteSqm13.71307.954,221.99126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Image: Constraint of the strutter foundation and plinth in:Image: Constraint of the strutter foundation and plinth in:							
11       5.9       propping etc. and removal of form for       Image: Constraint of the second sec			All kinds of soil.	Cum	51.45	286.85	14,758.43
5.9.1Foundations, footings, bases of columns, etc. for mass concreteSqm13.71307.954,221.99126.1Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Image: Concrete big state in the state in	11	5.9					
12     6.1     Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:		5.9.1	Foundations, footings, bases of columns, etc. for	Sam	13.71	307.95	4,221.99
12 6.1 modular) bricks of class designation 7.5 in foundation and plinth in:							.,===:00
foundation and plinth in:	12	6 1	modular) bricks of class designation 7.5 in				
6.1.2 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 20.66 6,658.25 1,37,559.4		0.1	foundation and plinth in:				
		6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	20.66	6,658.25	1,37,559.45

				• • • •		<u> </u>
SI. NO.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
13	13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :				
	13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	85.70	406.10	34,802.77
14	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	12.41.2	110 mm diameter	metre	20.00	319.75	6,395.00
15		Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
		Coupler				
	12.42.1.2	110 mm	each	3.00	119.95	359.85
16	12.42.3	Single tee with door				
		110x110x110 mm	each	4.00	205.45	821.80
17		Single tee without door				
		110x110x110 mm	each	4.00	190.75	763.00
18		Bend 87.5°				
	12.42.5.2	110 mm bend	each	5.00	132.00	660.00
Total = Rs.						8,20,576.36
GST @ 6.33% = Rs.						51,942.00
Estimated Total = Rs.						8,72,518.36
		Total Va	lue of V	<u>Vork (Excl. 0</u>	GST) = Rs.	7,39,422.00

### Name of work: External painting & minor repairing works for Philosophy Building at Assam University Campus Silchar.

SI. No.	Item No.		Unit	Quantity	Rate	Amount
1	13.112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sgm) over existing cement paint surface	Sqm	1,837.70	108.60	1,99,574.22
2	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	1,000.00	16.35	16,350.00
3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		75.00	123.85	9,288.75
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.99.1	One or more coats on old work	Sqm	260.00	86.55	22,503.00
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sqm	22.00	941.95	20,722.90
6	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.5	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	2.81	6,833.40	19,201.85
7	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand) Demolishing cement concrete manually/ by	Sqm	65.00	324.30	21,079.50
8	15.2	mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	0.90	2,007.10	1,806.39
9	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in charge.				
	15.7.4	In cement mortar	Cum	0.75	1,698.45	1,273.84
10	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil. Centering and shuttering including strutting,	Cum	11.25	286.85	3,227.06
11	5.9	propping etc. and removal of form for				
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	4.00	307.95	1,231.80
12	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	1.00	6,658.25	6,658.25

SI.	No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
	13	13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :				
		13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	20.00	406.10	8,122.00
						Total = Rs.	3,31,039.56
					GST @ 6.3	83% = Rs.	20,955.00
	Estimated Total = Rs. 3,51,99					3,51,994.56	
	Total Value of Work (Excl. GST) = Rs. 2,98				2,98,300.00		

#### Name of work: External painting & minor repairing works for English & Foreign Language Building at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth	•	Quantity		
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	3,236.66	108.60	3,51,501.28
	13.112.1	sqm) over existing cement paint surface	Sqiii	5,250.00	100.00	5,51,501.20
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	1,200.00	16.35	19,620.00
		including necessary repairs to scratches etc.	•	,		,
		complete Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
		manufacturer, over the plastered wall surface to				
3	13.80	prepare the surface even and smooth complete.	Sqm	125.00	123.85	15,481.25
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	383.39	86.55	33,182.40
		Denoving along games with sutty and sails	•			,
5	14.5	Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sgm)	Sqm	50.70	941.95	47,756.87
	_					,
6	13.2	15 mm cement plaster on the rough side of single				
0	-	or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	110.00	324.30	35,673.00
		Providing and fixing on wall face unplasticised Rigid				
		PVC rain water pipes conforming to IS : 13592 Type				
7	12.41	A, including jointing with seal ring conforming to IS				
		: 5382, leaving 10 mm gap for thermal expansion,				
		(i) Single socketed pipes.				
	12.41.2	110 mm diameter	metre	128.00	319.75	40,928.00
		Providing and fixing on wall face unplasticised - PVC				
		moulded fittings/accessories for unplasticised Rigid				
8	12.42	PVC rain water pipes conforming to IS : 13592 Type				
Ũ		A, including jointing with seal ring conforming to IS				
		: 5382, leaving 10 mm gap for thermal expansion.				
	12.42.1	Coupler				
	12.42.1.2		each	30.00	119.95	3,598.50
9		Single tee with door	cacit	30.00	119.99	5,555.50
		110x110x110 mm	each	5.00	205.45	1,027.25
10	12.42.4	Single tee without door				
		110x110x110 mm	each	6.00	190.75	1,144.50
11		Bend 87.5°			105.55	
	12.42.5.2	110 mm bend	each	12.00	132.00	1,584.00
					fotal = Rs.	5,51,497.05
				GST @ 6.3 Estimated T	<u>3% = Rs.</u>	<u>34,910.00</u> 5,86,407.05
		Total Va		Nork (Excl. G		4,96,955.00
		10(4) V4				4/30/303:00

# Name of work: External painting & minor repairing works for Academic Building (Bengali,Hindi & Sanskrit at Assam University Campus Silchar.

SI. No.	Item No.		Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sam	3,076.50	108.60	3,34,107.90
		sam) over existing cement paint surface		-,		-,,
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Sqm	800.00	16.35	13,080.00
		including necessary repairs to scratches etc.	-			
		complete Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
	10.00	manufacturer, over the plastered wall surface to			100.05	
3	13.80	prepare the surface even and smooth complete.	Sqm	300.00	123.85	37,155.00
		prepare the surface even and smooth complete.				
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sqm	889.41	86.55	76,978.44
		Renewing glass panes, with putty and nails	-			
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old				
5	14.5	putty:				
	1	Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	37.13	941.95	34,974.60
					Total = Rs.	
	4,96,295.94 31,416.00					
	GST @ 6.33% = Rs.					
	Estimated Total = Rs.					
		Total Va	lue of \	Nork (Excl. 0	6ST) = Rs.	4,47,214.00

# Name of work: External painting & minor repairing works for Fine Arts & Miscommunication Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
1	13.112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	Sqiii	4,193.26	108.60	4,55,388.04
2	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete		1,200.00	16.35	19,620.00
3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		155.00	123.85	19,196.75
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.99.1	One or more coats on old work	Sqm	749.80	86.55	64,895.19
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sqm	33.88	941.95	31,913.27
	5,91,013.24					
GST @ 6.33% = Rs.						37,411.00
Estimated Total = Rs. Total Value of Work (Excl. GST) = Rs.						6,28,424.24
		Total Va	lue of V	Nork (Excl. C	JSI) = Rs.	5,32,563.00

### Name of work: External painting & minor repairing works for Old Guest House Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sam) over existing cement paint surface	Sqm	2,560.13	108.60	2,78,030.12
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth	Carro	1 0 2 0 0 0	16.25	16 677 00
Z	15.00	including necessary repairs to scratches etc.	Sqm	1,020.00	16.35	16,677.00
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	550.00	123.85	68,117.50
		prepare the surface even and smooth complete.				
	12.00	Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give an even shade :				
		One or more coats on old work	-		06.55	
	13.99.1		Sqm	460.71	86.55	39,874.45
_		Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old				
		putty: Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sam	13.44	941.95	12,659.81
		Providing and laying in position cement concrete of				
6	4.1	specified grade excluding the cost of centering and				
		shuttering - All work up to plinth level :				
		1:3:6 (1 Cement : 3 coarse sand (zone-III) derived				
	4.1.5	from natural sources : 6 graded stone aggregate 20	Cum	3.19	6,833.40	21,798.55
		mm nominal size derived from natural sources)				
	4,37,157.42					
GST @ 6.33% = Rs.						27,672.00
Estimated Total = Rs. Total Value of Work (Excl. GST) = Rs.						4,64,829.42
		Total Va	ue of V	WORK (EXCL. C	351) = KS.	3,93,923.00

# Name of work: External painting & minor repairing works for Boys Hostel No. 2 Building at Assam University Campus Silchar.

ABSTRACT	OF COST
ADDINACI	01 0001

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	1,774.14	108.60	1,92,671.60
		sam) over existing cement paint surface Removing white or colour wash by scrapping and				
		sand papering and preparing the surface smooth	-			
2	13.88	including necessary repairs to scratches etc.	Sqm	580.00	16.35	9,483.00
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sam	155.00	123.85	19,196.75
		prepare the surface even and smooth complete.				-,
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
		an even shade :				
	13.99.1	One or more coats on old work	Sam	800.00	86.55	69,240.00
		Demonstration and another and another	•			,
5	14.5	Renewing glass panes, with putty and nails				
5	14.5	wherever necessary including racking out the old putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sgm)	Sqm	35.10	941.95	33,062.45
6	13.2	15 mm cement plaster on the rough side of single				
Ŭ	-	or half brick wall of mix :	-			05 656 55
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	110.00	324.30 Total = Rs.	35,673.00
	3,59,326.80 22,745.00					
					<u>33% = Rs.</u> otal = Rs	3,82,071.80
	Estimated Total = Rs. Total Value of Work (Excl. GST) = Rs.					

# Name of work: External painting & minor repairing works for Boys Hostel No. 1 Building at Assam University Campus Silchar.

ABS	<b>FRACT</b>	OF	COST

SI. No.	Item No.		Unit	Quantity	Rate	Amount	
		Finishing walls with Premium Acrylic Smooth					
1	13.112	exterior paint with Silicone additives of required					
		shade					
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sam	2,976.25	108.60	3,23,220.75	
		sgm) over existing cement paint surface	- 4	_,		-,,	
		Removing white or colour wash by scrapping and					
2	13.88	sand papering and preparing the surface smooth	Sqm	1,200.00	16.35	19,620.00	
		including necessary repairs to scratches etc.					
		complete Providing and applying white cement based putty of					
		average thickness 1 mm, of approved brand and					
-		manufacturer, over the plastered wall surface to					
3	13.80	prepare the surface even and smooth complete.	Sqm	125.00	123.85	15,481.25	
		prepare the surface even and smooth complete.					
		Painting with synthetic enamel paint of approved					
4	13.99	brand and manufacture of required colour to give					
		an even shade :					
	13.99.1	One or more coats on old work	Sam	1,708.51	86.55	1,47,871.54	
		Denoving along parage with putty and pails		,		. ,	
5	14.5	Renewing glass panes, with putty and nails					
5	14.5	wherever necessary including racking out the old putty:					
		Float glass panes of nominal thickness 4 mm					
	14.5.1	(weight not less than 10kg/sgm)	Sqm	44.00	941.95	41,445.80	
						,	
6	13.2	15 mm cement plaster on the rough side of single					
0	-	or half brick wall of mix :					
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	108.00	324.30 Total = Rs.	35,024.40	
	5,82,663.74						
	<u>36,883.00</u> 6,19,546.74						
	Estimated Total = Rs.						
	Total Value of Work (Excl. GST) = Rs.						

### Name of work: External painting & minor repairing works for Girls Hostel No. 1 Building at Assam University Campus Silchar. ABSTRACT OF COST

SI. No.	Item No.		Unit	Quantity	Rate	Amount
1	13,112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required				
1	13.112	shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	4,793.16	108.60	5,20,537.18
	13.112.1	sgm) over existing cement paint surface	Sqiii	4,795.10	108.00	5,20,557.16
		Removing white or colour wash by scrapping and sand papering and preparing the surface smooth				
2	13.88	including necessary repairs to scratches etc.	Sqm	1,200.00	16.35	19,620.00
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to				
3	13.80	prepare the surface even and smooth complete.	Sqm	320.00	123.85	39,632.00
		prepare the surface even and smooth complete.				
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give				
	15.55	an even shade :				
	13.99.1	One or more coats on old work	Sam	1,298.01	86.55	1,12,342.77
-	1515511	Denousing place general with with and weils	5q	1,250101	00155	1/12/3/21/7
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old				
5	1113	putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	100.40	941.95	94,571.78
6	12.2	15 mm cement plaster on the rough side of single				
6	13.2	or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	110.00	324.30	35,673.00
		Providing and laying in position cement concrete of specified grade excluding the cost of centering and				
7	4.1	shuttering - All work up to plinth level :				
		1:3:6 (1 Cement : 3 coarse sand (zone-III) derived				
	4.1.5	from natural sources : 6 graded stone aggregate 20	Cum	2.06	6,833.40	14,076.80
		mm nominal size derived from natural sources)				
					Total = Rs.	8,36,453.53
				GST @ 6.3 Estimated T	33% = Rs.	<u>52,948.00</u> 8,89,401.53
		Total Va	lue of \	Vork (Excl. 0		7,53,730.00
L						-,,,

### Name of work: External painting & minor repairing works for Gym Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount	
		Finishing walls with Premium Acrylic Smooth					
1	13.112	exterior paint with Silicone additives of required					
		shade					
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	1,155.54	108.60	1,25,491.64	
		sgm) over existing cement paint surface	- 4	_,			
		Removing white or colour wash by scrapping and					
2	13.88	sand papering and preparing the surface smooth	Sqm	800.00	16.35	13,080.00	
		including necessary repairs to scratches etc.					
		Providing and applying white cement based putty of					
		average thickness 1 mm, of approved brand and					
3	12.00	manufacturer, over the plastered wall surface to		250.00	122.05	42 247 50	
3	13.80	prepare the surface even and smooth complete.	Sqm	350.00	123.85	43,347.50	
		r - Francisco - Fr					
	12.00	Painting with synthetic enamel paint of approved					
4	13.99	brand and manufacture of required colour to give					
		an even shade :					
	13.99.1	One or more coats on old work	Sqm	287.66	86.55	24,896.97	
		Renewing glass panes, with putty and nails					
5	14.5	wherever necessary including racking out the old					
		putty:					
		Float glass panes of nominal thickness 4 mm					
	14.5.1	(weight not less than 10kg/sqm)	Sqm	22.28	941.95	20,986.65	
	ļ		I		Total = Rs.	2,27,802.76	
	GST @ 6.33% = Rs.						
	Estimated Total = Rs.						
	Total Value of Work (Excl. GST) = Rs.						

# Name of work: External painting & minor repairing works for Central Library & Computer Centre Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
1	13.112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	Sqm	6,100.00	108.60	6,62,460.00
2	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete		2,500.00	16.35	40,875.00
3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		250.00	123.85	30,962.50
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.99.1	One or more coats on old work	Sqm	646.92	86.55	55,990.93
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sqm	10.00	941.95	9,419.50
6	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	146.38	324.30	47,472.07
					Total = Rs.	8,47,180.00
					83% = Rs.	53,626.00
				Estimated T		9,00,806.00
		Total Va	lue of <b>V</b>	Nork (Excl. 0	GST) = Rs.	7,63,395.00

# Name of work: External painting & minor repairing works for Day care Building at Assam University Campus Silchar.

ABSTRACT	OF COST
----------	---------

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	1,001.20	108.60	1,08,730.32
		sgm) over existing cement paint surface	•	,		
		Removing white or colour wash by scrapping and				
2	13.88	sand papering and preparing the surface smooth including necessary repairs to scratches etc.	Sqm	962.00	16.35	15,728.70
		complete				
		Providing and applying white cement based putty of				
		average thickness 1 mm, of approved brand and				
3	13.80	manufacturer, over the plastered wall surface to	Sqm	100.00	123.85	12,385.00
5	15.00	prepare the surface even and smooth complete.	Sqiii	100.00	125.05	12,305.00
		Painting with synthetic enamel paint of approved				
4	13.99	brand and manufacture of required colour to give				
	15155	an even shade :				
	13.99.1	One or more coats on old work	Sam	447.00	86.55	38,687.85
		Demonstration of the south south south south south	- 4			,
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old				
5	14.5	putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	22.00	941.95	20,722.90
6	13.2	15 mm cement plaster on the rough side of single				
-	12.2.2	or half brick wall of mix :	6	50.00	324.30	16 215 00
	13.2.2	1:6 (1 cement: 6 fine sand) 15 mm cement plaster on rough side of single or	Sqm	50.00	324.30	16,215.00
		half brick wall finished with a floating coat of neat				
7	13.8	cement of mix :				
	13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	80.00	406.10	32,488.00
					Total = Rs.	<u>2,44,957.77</u> 15,506.00
	GST @ 6.33% = Rs.					
		<b>T</b> -L-1 \/-1		Estimated T		2,60,463.77
		lotal va	iue of V	Nork (Excl. G	151) = KS.	2,20,732.00

# Name of work: External painting & minor repairing works for Health Centre Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
		Finishing walls with Premium Acrylic Smooth				
1	13.112	exterior paint with Silicone additives of required				
		shade				
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10	Sqm	1,000.00	108.60	1,08,600.00
	10111211	sam) over existing cement paint surface	Sqm	1,000100	100.00	1,00,000100
		Removing white or colour wash by scrapping and				
2		sand papering and preparing the surface smooth	Sqm	700.00	16.35	11,445.00
		including necessary repairs to scratches etc.	- 1			,
		complete				
3	13.99	Painting with synthetic enamel paint of approved				
5	13.99	brand and manufacture of required colour to give				
		an even shade : One or more coats on old work				
	13.99.1		Sqm	253.37	86.55	21,929.17
		Renewing glass panes, with putty and nails				
4	14.5	wherever necessary including racking out the old				
	_	putty:				
		Float glass panes of nominal thickness 4 mm				
	14.5.1	(weight not less than 10kg/sqm)	Sqm	16.00	941.95	15,071.20
		15 mm cement plaster on the rough side of single				
5	13.2	or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	60.00	324.30	19,458.00
		15 mm cement plaster on rough side of single or				
6	13.8	half brick wall finished with a floating coat of neat				
6	13.8	cement of mix :				
	10.00		<u> </u>	111.00	406.40	46 205 10
l	13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	114.00	406.10 Total = Rs.	46,295.40
						2,22,798.77
				Estimated T	<u>33% = Rs.</u>	<u>14,103.00</u> 2,36,901.77
		Total Va		Nork (Excl. 0		2,00,764.00
L		I ULAI VA		TOIR LEXCI.	$3317 - KS_{1}$	2,00,704.00

# Name of work: External painting & minor repairing works for Administrative Building at Assam University Campus Silchar.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount	
1	13.112	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade					
	13.112.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sam) over existing cement paint surface	Sqm	5,640.10	108.60	6,12,514.86	
2	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete		3,948.07	16.35	64,550.94	
3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		250.00	123.85	30,962.50	
4	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :					
	13.99.1	One or more coats on old work	Sqm	1,921.56	86.55	1,66,311.02	
5	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:					
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sqm	19.02	941.95	17,915.89	
6	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :					
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	85.00	324.30	27,565.50	
7	13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :					
	13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	84.00	406.10	34,112.40	
	Total = Rs.						
					33% = Rs.	60,384.00 10,14,317.11	
	Estimated Total = Rs.						
	Total Value of Work (Excl. GST) = Rs.						

### **ABSTRACT OF COST**

Name of work: Repairing and protection of Water reservoir coverings of different Academic Departments from Monkeys and repairing of Grill openings and cupboard of 'Boys and Ladies' Hostel at Assam University Silchar Campus.

SI. No.	Name of the Building	Amount (Excl. GST)
1	Boys and Ladies Hostel	63,37,304.00
	Total = Rs.	63,37,304.00

Estimate for Repairing and protection of water reservoir coverings of different Academic Departments from Monkeys and repairing of Grill openings and cupboard of Boy's and Ladie's Hostels of Assam University Silchar Campus.

SI. No.	Item No.	Description of Item	Unit	Quantity	Rate	Amount
1	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P.brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)- <b>For Cupboard</b>	Kg	3150.00	433.95	13,66,942.50
2	21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineerin- charge				
	21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	Sqm	1,910.00	965.10	18,43,341.00
3	13.1	12 mm cement plaster:				
	13.1.1	1:4 (1 cement : 4 fine sand)-Inner and Outer wall	Sqm	1,950.00	294.85	5,74,957.50
4	13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture- <b>Grill</b>		1572.00	191.40	3,00,880.80
5	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	Kg	14,905.00	197.70	29,46,718.50
	Fotal = Rs.	70,32,840.00				
		Add increase	e in GS	Г @ 6.33% on	Total = Rs.	4,45,179.00
Estimated cost = Rs.						74,78,019.00
		Total Va	lue of \	Nork (Excl. G	GST) = Rs.	63,37,304.00

### **ABSTRACT OF COST**

# Name of work: Repairing and Painting of MBA Building (Old building & Annex building) at Assam University Silchar Campus

SI. No.		Name of the Building		Amount (Excl. GST)
1	MBA Building			40,77,714.00
			Total = Rs.	40,77,714.00

### Name of work: Estimate for Repairing and painting of MB building (Old Building & Annex Building) at Assam University Silchar Campus.

SI. No.	Item No	Description of Item	Unit	Quantity	Rate	Amount
1	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	Sqm	250.00	324.30	81,075.00
2	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished,premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
	8.2.2	Granite stone slab colour black, Cherry/Ruby red				
3	11.46	Area of slab upto 0.50 sqm Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.	Sqm	15.00	4679.35	70,190.25
	11.46.2	Size of Tile 600x600 mm	Sqm	630.00	1466.50	9,23,895.00
4	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	50.00	2,007.10	1,00,355.00
5	13.1	12 mm cement plaster:				
6	21.1	1:6 (1 cement : 6 fine sand) Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P.brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for		275.00	282.00	77,550.00
	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				-
	2.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kg	2,150.00	531.80	11,43,370.00
7	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
	21.3.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sgm)	Sqm	180.00	1,019.80	1,83,564.00

8		Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing				
8						
8		10 litre low level white vitreous china flushing				
8						
8		cistern & C.P. flush bend with fittings & C.I.				
	17.3	brackets, 40 mm flush bend, overflow arrangement				
	17.10	with specials of standard make and mosquito proof coupling of approved municipal design complete,				
1		including painting of fittings and brackets, cutting				
		and making good the walls and floors wherever				
		required :				
		W.C. pan with ISI marked white solid plastic seat				
	17.3.1	and lid	each	2.00	6,941.30	13,882.60
		Brick work with common burnt clay F.P.S. (non				
9	6.1	modular) bricks of class designation 7.5 in				
	(1)	foundation and plinth in:		7 50	6 6 6 9 9 5	40.026.00
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand) 15 mm cement plaster on rough side of single or	cum	7.50	6,658.25	49,936.88
10	13.8	half brick wall finished with a floating coat of neat				
10	1510	cement of mix :				
	13.8.2	1:4 (1 cement: 4 fine sand)	Sqm	225.00	406.10	91,372.50
		Finishing walls with Premium Acrylic Smooth				
11	13.112	exterior paint with Silicone additives of required				
		shade Old work (Two or more coats applied @ 1.43 ltr/ 10				
	13.112.1	sqm) over existing cement paint surface	Sqm	5,705.00	108.60	6,19,563.00
		Removing white or colour wash by scrapping and				
12		sand papering and preparing the surface smooth	Sqm	5,600.00	16.35	91,560.00
12	15.00	including necessary repairs to scratches etc.	Sqiii	5,000.00	10.55	51,500.00
		complete Distempering with 1st quality acrylic distember				
		(Ready mix) having VOC content less than 50				
13	13.90	grams/ litre of approved brand and manufacture to				
		give an even shade :				
	13.90.1	Old work (one or more coats)	Sqm	5,432.00	56.80	3,08,537.60
	10.00	Painting with synthetic enamel paint of approved				
14	13.99	brand and manufacture of required colour to give an				
	13.99.1	even shade : One or more coats on old work	Sqm	720.00	86.55	62,316.00
	10.0011	Renewing glass panes, with putty and nails	<u> </u>	720100	00100	02/010100
15	14.5	wherever necessary including racking out the old				
		putty:				
	14.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sgm)	Sqm	13.44	941.95	12,659.81
		Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type				
16	12.41	A, including jointing with seal ring conforming to IS				
10	12.71	: 5382, leaving 10 mm gap for thermal expansion,				
		(i) Single socketed pipes.				
<b>├</b> ── <del> </del>	12.41.2	110 mm diameter	metre	15.00	319.75	4,796.25
			meare	15.00	515.75	1,7 50.25
		Providing and fixing on wall face unplasticised -PVC moulded fittings/ accessories for unplasticised Rigid				
17	12.42	PVC rain water pipes conforming to IS : 13592 Type				
<u>-</u>		A, including jointing with seal ring conforming to IS				
		: 5382, leaving 10 mm gap for thermal expansion.				
	12.42.3	Single tee with door				
	12.42.3.2	110x110x110 mm	each	4.00	205.45	821.80
18		Single tee without door				
		110x110x110 mm	each	4.00	190.75	763.00
19		Bend 87.5° 110 mm bend	each	5.00	132.00	660.00
	12.72.J.2		Cacil	5.00	102.00	000.00
		Providing and applying white cement based putty of average thickness 1 mm, of approved brand and				
20	13.80	manufacturer, over the plastered wall surface to	Sqm	300.00	123.85	37,155.00
		prepare the surface even and smooth complete.				
$\vdash$						
		Providing and fixing Chlorinated Polyvinyl Chloride				
		(CPVC) pipes, having thermal stability for hot & cold				
· · ·		water supply, including all CPVC plain & brass				
		threaded fittings, including fixing the pipe with				
21	18.7					
21	18.7	clamps at 1.00 m spacing. This includes jointing of				
21	18.7					

SI. No.	Item No	Description of Item	Unit	Quantity	Rate	Amount
	18.7.2	Internal work - Exposed on wall 20 mm nominal dia Pipes	metre	25.00	325.10	8,127.50
22	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.		23.00	525.10	0,127.30
	18.9.5	External work 40 mm nominal dia Pipes	matra	55.00	559.20	20.756.00
23	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :	metre	55.00	559.20	30,756.00
	<u>18.19.3</u> 18.19.3.1	40 mm nominal bore Horizontal	each	8.00	815.05	6,520.40
		Vertical	each	3.00	1,049.20	3,147.60
24	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement :4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	Sqm	40.00	935.60	37,424.00
25	11.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matchingpigments etc., complete.	Sqm	15.00	1,107.05	16,605.75
26	9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
	9.20.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	5.04	2,818.50	14,205.24
27	9.96	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
	9.96.1	300x16 mm	each	2.00	260.30	520.60
28	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.97.1	300x10 mm	each	4.00	117.65	470.60
29	9.100	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.100.1	125 mm	each	4.00	60.05	240.20
30	13.16	6 mm cement plaster of mix :	Carro	200.00		72 204 50
31	<u>13.16.1</u> 6.4	1:3 (1 cement : 3 fine sand) Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :		290.00	253.05	73,384.50
	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3.6803	8288.35	30,503.61
32	6.12	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
	6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	Sqm	35.00	837.85	29,324.75

SI. No.	Item No	Description of Item	Unit	Quantity	Rate	Amount
		ELECTRICAL	Unic	Quantity	Rute	Amount
1	19.1	Supply,installation, testing and commissioning of 1200 mm sweep BLDC star rated ceiling fan.	Each	75.00	3,495.00	2,62,125.00
2	1.25	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc as required.		40.00	342.00	13,680.00
3	NS	Supply,installation, testing and commissioning of LED batten 18 W lights.	Each	85.00	565.00	48,025.00
4	NS	Supply,installation, testing and commissioning of 300mm exhaust fan.	Each	7.00	2,768.00	19,376.00
5	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch connections etc. as required	Each	6.00	495.00	2,970.00
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
6	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	metre	82.66	146.00	12,068.00
7	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	metre	48.00	167.00	8,016.00
8	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	metre	94.00	200.00	18,800.00
9	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	metre	60.00	249.00	14,940.00
Total = Rs.						45,25,254.00
Add increase in GST @ 6.33% on Total = Rs.						2,86,449.00
Estimated cost = Rs.					48,11,703.00	
	Total Value of Work (Excl. GST) = Rs.					40,77,714.00