

NOTICE INVITING E-TENDER

*for*

**SPECIAL REPAIR WORKS OF CIVIL AND ELECTRO-MECHANICAL MODALITIES AT ESIS  
HOSPITAL, MARGAO, GOA (PACKAGE-03)**

NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03



**WAPCOS**

**वाष्कोस लिमिटेड**  
**WAPCOS LIMITED**

(भारत सरकार का उपक्रम-जल शक्ति मंत्रालय)  
(A Government of India Undertaking-Ministry of Jal Shakti)

WAPCOS Limited

(A Government of India Undertaking)

Plot No-76-C, Sector-18, Gurugram-122015

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May 2026

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WAPCOS LIMITED

**VOLUME-I**  
**TECHNICAL BID**

WAPCOS LIMITED

## SECTION I

## NOTICE INVITING TENDER

NIT No.: WAP/C&amp;C/ESIS GOA/SR/PKG-3/2026/03

Date. 22.05.2026

Employees State Insurance Corporation (ESIS), has awarded WAPCOS Limited, for providing the Services. WAPCOS Limited (A Govt. of India Undertaking), for and behalf of Regional Director, Employees State Insurance Corporation (ESIS), Regional Office, Patto, Panaji, Goa-403001, Online Submission of Technical document, Tender Fees, EMD etc. as detail in Tender Percentage Rate mode from experienced and competent bidders, meeting prescribed qualifying criteria as mentioned in tender document. This is an Open E-tender in two Cover systems. The contract will be for a period of Special Repair (SR) work with One (1) year and Defect Liability Period (One year).

1.	Name of Work:	:	Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)
2.	Location	:	ESI Hospital, Margao, Goa- 403601
3.	Website for viewing tender/ Corrigendum/ Addendum	:	<a href="http://www.eprocure.gov.in">www.eprocure.gov.in</a>
4.	Website for e-Procurement / downloading and uploading Tender document/ Corrigendum/ Addendum	:	<a href="https://etenders.gov.in/eprocure/app">https://etenders.gov.in/eprocure/app</a>
5.	Estimated Value of Work	:	<b>Rs. 16,12,34,930 /- (Rupees Sixteen Crore Twelve Lakh Thirty Four thousand Nine hundred Thirty Only) excluding GST.</b>
6.	Cost of Tender Document	:	Rs. 10,000/- (Non-refundable) in form of Demand Draft in favour of WAPCOS Limited payable at Gurgaon/New Delhi. The tender fee shall be paid through NEFT/RTGS in the following Bank Account:  Account Number – 193502000000405 A/c Holder – WAPCOS Limited Bank Name – Indian Overseas Bank Branch name: NHB, Gurugram IFSC code: IOBA0001935
7.	Amount of Earnest Money Deposit	:	<b>Rs. 26,12,350.00/- (Rupees Twenty Six Lakh Twelve thousand Three hundred Fifty Only)</b> The EMD shall be deposited in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Bank Guarantee from nationalized/scheduled commercial banks or payment online in an acceptable form, safeguarding the purchaser's interest in all respects in favour of "WAPCOS Limited" payable at Gurugram and submitted in sealed envelope cover before the last date of technical bid submission.
8.	Project Completion Period	:	12 Months from the Date of Award including monsoon and Defect Liability Period of 1 year after completion

9.	Validity of Bid/Tender	:	120 Days
10.	Pre-bid Meeting and deadline for seeking Clarifications	:	N.A.
11.	Last date & time for online submission of Technical & Financial Bid.	:	04-June-2026 03:00 PM The bidder must officially procure/download the tender documents from the CPP portal of WAPCOS before the last date and time of sale of tender document in order to bid.
12.	Offline Submission of Tender Fees, EMD etc. as detailed asked in Tender Documents	:	04-June-2026 03:00 PM to following address: WAPCOS Limited Deputy Chief Engineer, C&C Division 76-C, Institutional Area, Sector – 18, Gurugram-122015, Haryana
13.	Online opening of Technical Bid	:	05-June-2026 03:00 PM
14.	Online opening of Financial Bid	:	To be Intimated to Technical Qualified Bidders
15.	WAPCOS Contact information	:	Deputy Chief Engineer C&C Division WAPCOS Limited 76-C, Institutional Area, Sector - 18 Gurugram-122015, Haryana Email: <a href="mailto:ccm@wapcos.co.in">ccm@wapcos.co.in</a> Tel. (+91-124)2399886
16.	Deadline for Clarification by the Bidders	:	Queries to be sent through E-mail on <a href="mailto:ccm@wapcos.co.in">ccm@wapcos.co.in</a> before 7 days of Last date & time for online submission
17.	Signing of Contract		The Successful tendered will have to execute an agreement in stamp paper as per prevailing government norms.

**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.**

The tender document has to be downloaded from above specified websites. Bidders are advised to visit above specified websites regularly for updates, i.e., Addendum/Corrigendum, if any. All the Addendum/Corrigendum up to submission of tender shall be the part of tender. The full details about the work, specifications, Drawings if any, terms and conditions etc. shall be available in the Tender Document. The tender document has to be submitted online on website <https://etenders.gov.in/eprocure/app>

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.

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.

### **IMPORTANT POINTS**

- 1.1 The bidder should be an Indian Registered Company under Companies Act 1956/Proprietorship Company/ Partnership Company.
- 1.2 All Bidders are hereby cautioned that Bids containing any deviation as described in Clauses of “Instructions to Bidders” shall be considered as non-responsive and shall be summarily rejected.
- 1.3 WAPCOS Ltd. reserves the right to accept or reject any or all bids without assigning any reasons thereof. No Bidder shall have any cause of action or claim against the WAPCOS. For rejection of his Bid and WAPCOS will not be bound to accept the lowest or any other tender.
- 1.4 No reimbursement of cost of any type or on any account will be paid to persons or entities submitting their Bid.
- 1.5 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.
- 1.6 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.
- 1.7 At the first instance the Technical Bids will be evaluated by the Tender Evaluation Committee (TEC) constituted for the purpose by WAPCOS. At the second stage, the financial bids of only those bidders, who qualify in the Technical Bid will be opened by the Committee members. The bid opening committee after evaluation of the Financial bids, will give its specific recommendations regarding the lowest responsive bid, which is to be selected along with a comparative statement duly signed by the members of the bid opening committee

## **SECTION-II**

### **INSTRUCTIONS TO BIDDER**

## 1.0 SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. 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 at :<https://etenders.gov.in/eprocure/app>

### A. REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrolment**” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) 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.

### B. SEARCHING FOR TENDER DOCUMENTS

- 1) 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.
- 2) 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.
- 3) 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.

**C. PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) 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.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

**D. SUBMISSION OF BIDS**

- 1) 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. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the tender fee as applicable and enter details of the instrument.
- 4) 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.
- 5) 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 all the bidders. Bidders are required to download the BOQ file, open it and complete the white colored (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.
- 6) The server time (which is displayed on the bidder's "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.
  - 7) 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.
  - 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
  - 9) 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.
  - 10) 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.

#### **E. ASSISTANCE TO BIDDERS**

- 1) Any **queries relating to the tender document and** the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7CPP Portal Helpdesk.
- 3) **For any assistance regarding the Tender Document and/or term and conditions the bidders may contact DCE (C&C), Commercial and Construction Division, Plot No-76-C, Sector-18, Gurugram; Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)** during office hours.

#### **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.

- i.** Submission of a tender by a tenderer implies that the tenderer has read this notice and all other Tender Documents and has made himself aware of the scope, the specifications, conditions of contract, local conditions and other factors having bearings on the execution of the work.
- ii.** 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:
  - a. **"Corrupt Practice"** means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;

- b. **“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;
- c. **“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;
- d. **“Collusive Practice”** means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly 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 incompetent 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.

- iii. The Contract shall be governed by each SECTION OF TENDER DOCUMENT i.e. instructions to bidders, selection & qualifying criteria, scope of works, General Conditions for Contract (GCC), Special Conditions for Contract (SCC), Annexure, Forms, Drawings if any, Technical Specification, Addendum / Clarification / Corrigendum etc. and all other Conditions mentioned in the tender documents.
- iv. 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 Bid Security Declaration 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.
- v. 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.

- vi. 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)

The Earnest Money Deposit **as mentioned in NIT and shall also be submitted** in physical form in favor of WAPCOS Ltd payable at Gurugram.

The EMD may be accepted only in the following forms:

- **Demand Draft of a Scheduled Bank.**
- **Fixed Deposit Receipt (FDR) of a Scheduled Bank in the name of WAPCOS Ltd.**
- **Bank Guarantee from Nationalized/ Scheduled Commercial Bank**

A part of earnest money is acceptable in the form of bank guarantee (in the specified format) also. In such cases 50% of earnest money or **Rs. 20 lakh** whichever is less, will have to be deposited in shape prescribed above and balance can be accepted in form of bank Guarantee issued by a scheduled bank as per the format mentioned in the tender (**Appendix-I**). The Bank Guarantee submitted as a part of Earnest Money shall be valid for a period of **SIX MONTHS** or more from the date of submission of the tender.

The EMD of unsuccessful tenderer(s) will be refunded after finalization of tender process. The Earnest Money deposit submitted by the successful tenderer shall be retained by WAPCOS Limited until the Performance Bank Guarantee (PBG) is submitted. EMD shall not carry any interest.

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

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

- 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 LOI/Contract. In case the LOI/Contract is silent in this regard then within 15 days after award of contract.
- iii. The successful Tenderer shall not accept the LOI within 15 (Fifteen) days from receipt of the same. If failed, the EMD shall be forfeited and the award of work may be liable to be cancelled.

Failing in submission in required format, bid will be rejected.

### 4.0 COST OF BIDDING

The Bidder shall bear all costs associated with the preparation and submission of the Bid as well as costs associated for facilitating the evaluation. WAPCOS Limited shall in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

## 5.0 LANGUAGE OF BID

The Bid and all related correspondence and documents relating to the Project shall be in English language only. 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.

## 6.0 CURRENCY OF BID

Bid prices shall be quoted in Indian Rupees (INR). Tender submitted by tenderer shall remain valid for acceptance as mentioned in NIT from the date set for submission of the tender. The tenderer shall not be entitled within the said period to revoke or cancel or vary the tender given or any item thereof, without the consent of WAPCOS Limited. In case tenderer revokes, cancels, or varies his tender in any manner without the consent of WAPCOS Limited, within this period, his earnest money will be forfeited.

## 7.0 ANNEXURES

The successful Bidder shall submit the following documents and also follow the guidelines as per “**Section of Annexures**” mentioned in tender document.

ANNEXURE - I : GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WORKS
ANNEXURE – II : FORM OF PERFORMANCE SECURITY(GUARANTEE)
ANNEXURE – III : FORMAT FOR AFFIDAVIT
ANNEXURE – IV : AGREEMENT PROFORMA
ANNEXURE – V : INTEGRITY PACT / FORMAT FOR INTEGRITY PACT AGREEMENT
ANNEXURE – VI : FORMAT OF RESUME OF PROPOSED PERSONNEL
ANNEXURE – VII : SAFETY CODES
ANNEXURE – VIII : MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS
ANNEXURE IX : FORMAT FOR ADVANCE PAYMENT BANK GUARANTEE
ANNEXURE X : FORMAT FOR GUARANTEE BONDS- WATER PROOFING
ANNEXURE XI : FORMAT FOR GUARANTEE BONDS- ANTI TERMITE

WAPCOS Limited reserves the right to reject any or all the bids or to cancel the Tender, without assigning any reason(s) whatsoever.

**SECTION-III**  
**SELECTION AND QUALIFYING CRITERIA**

**1.0 SITE VISIT**

Intending Bidder(s) have to visit site to inspect and examine the site and its surroundings at his own cost and satisfy themselves before submitting their bids as to, the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder(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 QUALIFYING CRITERIA: ONLINE TECHNICAL BIDSUBMISSION**

The intending bidders must read the terms & conditions of tender documents carefully. He should only submit his Technical Bid if he considers himself eligible and he is in possession of all the documents required.

**The Technical Bid shall be uploaded with coloured scanned copies of following documents. All the documents should be Serial wise as stated below along with check list and clearly marked page no. on each page.**

S.No.	Particular of Document	Yes	No	Page Nos.
a)	Authorization Letter to sign the Tender on bidder's original letter head or Power of attorney			
b)	Scanned copy of EMD as mentioned in NIT.			
c)	Scanned copy of Demand Draft for Tender Fee			
d)	Letter of Transmittal on bidder letter Head to submit Technical Bid <b>(Form-A)</b>			
e)	Yearly Turnover and Audited Balance Sheet for Last 5 (five) years ending on the financial year 2024-2025. <b>(Form-B)</b>			

S.No.	Particular of Document	Yes	No	Page Nos.
	<ul style="list-style-type: none"> <li>• The contractor should not have incurred any loss (profit after tax should be positive) in more than two years during last five years ending 2024-2025 duly audited by the Chartered Accountant.</li> <li>• Turnover: Average annual financial turnover should be at least 50% of the estimated cost of work during the last 3 consecutive financial years ending 2024-2025. <b>This should be duly audited by the Chartered Accountant doing Statutory Audit and mentioned UDIN Number on that certificate.</b></li> <li>• Net worth of the Company/firm as on 31<sup>st</sup> march of previous Financial Year, should be positive</li> <li>• Audited Full Balance Sheet and Profit &amp; loss Statement of Bidder for last 5 years should be verified by Chartered Accountant and mentioned UDIN</li> </ul>			
f)	<p>The bidder should have a Solvency of an Amount equal to 40% of the estimated cost after the date of publication of tender. <b><u>The Solvency Certificate shall be issued by the Nationalized/Scheduled Commercial bank after the date of publishing of Tender document.</u></b> The solvency certificate should be marked to tender Authority of WAPCOS Limited along with Name of the project (Form C)</p> <p>1. The Solvency Certificate shall be issued by the Nationalized/ Scheduled Commercial bank &amp; must have been issued after the date of publication of NIT &amp; be addressed to the tendering authority quoting the name of the work.</p> <p>2. MSME bidders may submit Banker's Certificate from a commercial Bank for a sum of at least 40% of the estimated cost of work or Net Worth certificate from CA with Unique Document Identification Number (UDIN) of minimum 10% of the estimated cost of work (Scanned copy of original to be uploaded). (Form C-1 and C-2)</p>			
g)	<p>The contractor should have satisfactorily completed the works as mentioned below during the last seven years ending previous day of last date of submission of tender. Details should be enclosed (Form D)</p>			

S.No.	Particular of Document	Yes	No	Page Nos.
	<p>One similar assignment costing not less than 80% of the estimated cost of work put to tender</p> <p style="text-align: center;">Or</p> <p>Two similar assignments of order value each not less than 50% of the estimated cost of work put to tender.</p> <p style="text-align: center;">Or</p> <p>Three similar assignments of order value each not less than 40% of the estimated cost of work put to tender</p>			
	<p>“Similar works” for hospital buildings shall mean <b>construction and/or repair/renovation of Hospital Buildings comprising Civil, Electrical and Electro-Mechanical services.</b></p> <p style="text-align: center;">And</p> <p>The bidder should have experience of <b>Successful execution, installation, testing, and commissioning of Modular Operation Theatre (OT)</b> in a hospital project. This may be a part of the same project as above or may be separate.</p> <p>Both the above conditions (Hospital Works and Modular OT Works) must be fulfilled independently by the bidder.</p> <p>The bidder shall submit Completion Certificate(s) for the same along-with LOI(s)/W.O(s) from respective Owner(s)/Client(s). The Completion certificates shall clearly specify the similar nature works. Otherwise the Completion Certificate will not be considered as experience in similar nature of work.</p> <p>The copy of completion certificates shall be got verified from the issuing authority/organizations prior to award of works.</p> <p>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.</p> <p>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.</p> <p>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</p> <p>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</p>			

S.No.	Particular of Document	Yes	No	Page Nos.
	<p>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. <u>In case of mismatch in value in TDS certificate &amp; completion certificate, then value mentioned in TDS certificate will be considered during evaluation.</u></p> <p><b>WAPCOS reserves the right to get this work inspected through its representatives before or after accepting the Technical bid.</b></p> <p><b>(Please submit copy of Purchase Order / Work order and completion certificate issued by the client).</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Completion certificates and work orders with bill of quantities should be enclosed which clearly indicates the name and nature of work, value of work and time period.</li> <li>2. TDS (26 AS) downloaded from the web matching with the experience certificate should be attached.</li> <li>3. All the eligible similar works executed and submitted by the bidders may be inspected by a committee which may consist of client or any other authority as decided by NIT approving authority.</li> <li>4. Experience certificate issued by the same management/ sister concern/ joint venture etc. are not acceptable.</li> </ol>			
h)	Name, Address, details of the Organization, Name(s) of the Owner/Partners/Promoters and Directors of the firm / company. <b>(Form-E)</b>			
i)	The Blacklisting policy of the company is available on the official website of WAPCOS Limited. The bidder have to mandatorily furnish an undertaking addressing the same to Engineer-in-charge in the form of certificate to abide the contents of Blacklisting Policy. The format of undertaking is provided. Any action in violation of the blacklisting policy or to the certificate furnished shall result in cancellation of tender at the stage before or after the award of work. <b>Bidder should submit the declaration (Form-F)</b>			
j)	Letter of understanding the project site on bidder letter Head <b>(Form-G).</b>			
k)	'No Deviation Certificate' in prescribed format in Bidder's Letter Head <b>(Form-H).</b>			
l)	Consent Letter to execute the Integrity Pact along with Rs. 100 stamp paper (Integrity agreement) <b>(Form-I).</b>			

S.No.	Particular of Document	Yes	No	Page Nos.
m)	Goods and Service Tax (GST): Bidders are advised to get themselves registered for GST in at different place, which are mandatory, as per Govt. of India notification regarding GST. Accordingly, bidder shall submit relevant documents if already registered. If not registered till date of submission of bid, bidder will give undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submission of bills.			
n)	The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Company/Partnership Company/Limited company private or public or corporation. <b>Joint Ventures/Consortia of firms are not accepted.</b> Copy of Certificate of Incorporation/ Registration/ Partnership Deed or any other relevant document, as applicable, should be submitted along with a copy of address proof.			
p)	Copy of PAN Number, GST registration, EPF & ESI registration (copy of registration)			
q)	Each page of the all Volume of Tender document & Addendum/ Corrigendum shall be signed (use scanned signature) by the bidders submitting the Tender in token of his/their having acquainted himself/ themselves and accepted the entire tender documents including various conditions of contract. Any bid with any of the documents not so signed is liable to be rejected at the discretion of WAPCOS Limited. <b>(Do Not Submit with the document of Offline Submission)</b>			
r)	The experience in similar nature of work should be supported by certificates issued by the client's organization.			
s)	Escalation: All rates as per Estimated cost fixed for entire contract period as well as extended period for completion of the works. No escalation shall be applicable on this contract.			

S.No.	Particular of Document	Yes	No	Page Nos.
t)	The Bidder should have valid class contractor license in composite category or Civil/Electrical from PWD or registration certificate (CPWD or any government department).			
u)	Undertaking regarding the Validity of the bid should be 120 days and after the award of work, if he (firm) is not taking over the work than his firm can be blacklisted for 2 years in participating of WAPCOS future tender.			
x)	Bidder shall submit the undertaking for understanding regarding that Defect Liability Period shall be one year.			
xi)	Bar Chart to explain the execution of work			
	<p>*The agency/contractor shall comply to the requirements, stipulations in the codes, standards and regulation Central Electricity authority/ Delhi Norms. (Measurements relating to Safety and Electric Supply) Regulations 2010 with all its amendments up to date.</p> <ul style="list-style-type: none"> <li>• If the bidder fail to submit any of the above document than it is liable to be rejected at the discretion of WAPCOS Limited.</li> <li>• All uploaded tender document should be readable. In case the uploaded tender documents are found not readable even after zoom, the bidder will stand ineligible.</li> <li>• If a tendered quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub-head in percentage rate tender, the tender shall be treated as invalid.</li> </ul>			

**Financial Bid or traces of information regarding financial bid should not be included in the Technical Bid. If found so, the bid shall be summarily rejected.**

Technical Bids are to be submitted to determine that the bidder has a full comprehension of the tendered work. Where a bidder's technical submittal is found non - compliant with the requirement or work, it may be rejected. The Financial Bid will be opened only for the agencies whose technical bids are accepted by the competent authority.

### 3.0 OFFLINE SUBMISSIONS OF DOCUMENTS

The Bidder shall submit following Document offline also.

- 1. EMD & Tender submission fee** in Original in separate sealed envelope clearly labelled as "EMD & TENDER FEE" for the work (Write Name of Work/Project as mentioned in NIT) along with Details of Bidders Address, Phone, and E-mail on Envelope.

**NOTE:** *Above envelope shall be submitted in one single envelope clearly labeled as “Documents for Offline Submission” for the Work (Write Name of Work/Project as mentioned in NIT) along with Details of Bidders Address, Phone, and E-mail on Envelope.*

*The offline submissions (duly stamped & signed) as mentioned above shall be submitted on WAPCOS address given in NIT as per date & time mentioned in NIT. In case of non-submission of above offline documents, bids are liable to be rejected.*

**Note:** *The Company reserves the right to waive minor deviations/submissions if they do not materially affect the capability of the Tenderer to perform the contract.*

#### **4.0 CONTENTS OF FINANCIAL BID**

**The Financial Bid should be uploaded separately before last date & time of submission mentioned in the tender document.**

The estimated cost mentioned in NIT is based on the rates of item of works in DSR plus Cost Index of Goa and Non-DSR items on market rate. The quoted rate filled in Schedule of Quantities should include all associated costs with the project including any out of pocket / mobilization expenses, necessary lead or lift associated with and not specified **excluding GST and other taxes., TDS, if any applicable as per Govt. terms, shall be paid by the Contractor. Rates quoted in the price bid shall be exclusive of GST. GST shall be reimbursed on submission of GST submission proof.**

Deduction of TDS and other deductions on payment made to the contractor shall be applicable as per extant rules.

The payment will be made for actual measurements certified by Engineer in Charge at the accepted rates in the price schedule/Bill of Quantities (BoQ).

#### **5.0 OPENING OF FINANCIAL BID**

After opening of technical bid, a list of short - listed agencies will be prepared. Thereafter, the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified date & time.

The company reserves the right to waive minor deviations if they do not materially affect the capability of the Tenderer to perform the contract.

#### **6.0 AWARD CRITERIA**

After closing of Technical & Financial Bid process, WAPCOS Ltd. will award, the contract to the bidder, whose tender has been determined to be substantially responsive, complete and in accordance with the tender document, and whose total evaluation price for the undertaking the project as detailed in the scope of work is the lowest. If the financial bids of lowest two bidders are equal, then the tender will be treated as cancelled and shall be re-tendered as per the WAPCOS rules.

**SECTION– IV  
GENERAL CONDITIONS TO CONTRACT**

## 1.0 GENERAL RULES AND DIRECTIONS

<b>General Rules &amp; Directions</b>	1.	<p>The work proposed for execution by contract will be notified in a form of invitation to tender by publication in Newspapers / or posted on website as the case may be.</p> <p>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 guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills.</p>
	2.	<p>In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power of Attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.</p>
	3.	<p>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.</p>
	4.	<p>Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.</p> <p>The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.</p> <p>In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.</p> <p>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 and the lowest contractors those have quoted equal amount of their tenders.</p> <p>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</p>

		<p>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.</p> <p>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 Bid Security Declaration of each lowest contractors.</p> <p>Contractor, whose earnest money is forfeited because of no 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.</p>
	5.	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.	WAPCOS 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.
	8.	The memorandum of work tendered for and the schedule of materials to be supplied by the WAPCOS and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
	9.	The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them.
	10.	In the case of Percentage RateTendersbelow/above, only percentage quoted shall be considered. Any tender containing item rate below/above the rates quoted is liable to be rejected. 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.
	11.	In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
	12.	All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
	13.	<p>i. <b>The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the tendered amount</b> (This guarantee shall be in banker's cheque of any scheduled bank/DD/PBG of any scheduled bank/pay order of any scheduled bank (in case bank guarantee is less than Rs.10000/-) or government securities or fixed deposit receipts or bank guarantee of any scheduled bank or in accordance with the prescribed form) 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 7 days period 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 of 7 days on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in Charge. However, in case last day of submission of PG happens to be a bank holiday the last day of submission shall be the next working day.</p> <p>i. <b>The Performance Guarantee shall be valid up to the stipulated date of completion plus 60 days beyond that.</b> In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.</p> <p>ii. The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which WAPCOS is</p>

	<p>entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:</p> <p>a. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.</p> <p>b. Failure by the contractor to pay 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.</p> <p>iii. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full.</p> <p>iv. The Performance Guarantee shall be returned to the Contractor soon after the completion of works and issuance of the completion certificate.</p> <p><b>Security Deposit-</b>The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfilment of his contract, an amount equal to 2.5% of the tendered value of the work. 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. WAPCOS Ltd. shall deduct Security Deposit of 2.5%. The Security Deposit will be refunded after satisfactory completion of defect liability period.</p> <p>i. <b>Defect liability period shall be one year.</b></p>
14.	<p>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.</p>
15.	<p>All the taxes applicable in respect of this contract shall be payable by the Contractor and WAPCOS will not entertain any claim whatsoever in respect of the same. All billing by the Contractor should be in the name of “<b>WAPCOS Limited, Upper Ground Floor, 59A Milrock Riverview, Ribandar, Panjim – Goa 403 006” bearing the GSTIN:30AAACW0764A1Z2</b>”. In this type of billing, GST will be applicable as per the GST slabs. The GST charged shall be reimbursed by WAPCOS Limited on submission of following documents (proof of GST paid and filing): 1) GSTR-1 2) GSTR-3 3) GST Challan. <b>If WAPCOS does not get GST input credit, WAPCOS is not liable to pay GST to the awarded bidder.</b></p> <p>The bidder/contractor acknowledges that under the present Contract/Agreement/Work Order/Arrangement, WAPCOS is only working as intermediary between ESIS GOA being Principal Employer/ Client and bidder/contractor. Thus, the bidder/contractor unconditionally acknowledges that the payments under the present contract/Agreement/Work Order/Arrangement shall be made proportionately by WAPCOS only on back-to-back basis i.e. after 21 days subject to receipt of payment from ESIS GOA being Principal Employer/Client. The bidder/contractor also unconditionally agree that in the</p>

		event the payment or part thereof, under the present Contract/Agreement/Work Order/Arrangement is not received from ESIS GOA, then WAPCOS &/or any of its Employee/Officer shall not be responsible to pay any amount to bidder/contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.				
	16.	The contractor shall give a list of WAPCOS employees related to him.				
	17.	The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.				
	18.	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. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.				
	19.	The Agency has to submit the following details of the work in hand				
		Name of Work	Name and particulars where work is being executed	Value of work	Position of works in progress	Remarks
		(1)	(2)	(3)	(4)	(5)
	20.	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 WAPCOS may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.				
	21	The Contractor shall carry out the Structural Assessment through IITs/NITs/other reputed Government Engineering Colleges, as per the requirement of the work as directed by engineer in charge.				

## 2.0 CONDITIONS OF CONTRACT

<b>Definitions</b>	1.	The Contract 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.
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	<p>2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-</p> <ol style="list-style-type: none"> <li>i. <b>“Client / Employer”</b> shall mean “WAPCOS Limited”, A Government of India undertaking- Ministry of Jal Shakti, on behalf of Regional Director, ESIS GOA, ESIS Regional Office, Patto, Panaji, include their successors &amp; permitted assigns as well as their authorized officer/ representatives</li> <li>ii. The <b>“COMPANY / WAPCOS”</b> shall mean WAPCOS Limited.</li> <li>iii. The expression <b>works</b> or <b>work</b> shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.</li> <li>iv. The <b>Site</b> shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.</li> <li>v. <b>The Contractor</b> 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.</li> <li>vi. <b>The Engineer-in-charge</b> means the Engineer Officer appointed by WAPCOS or his duly authorized representative who shall direct, supervise and be in charge of the work for the purpose of this Contract</li> <li>vii. <b>Accepting Authority</b> shall mean the authority mentioned in Special Conditions of Contract.</li> <li>viii. <b>Tenderer / Bidder</b> shall mean the firm/party who intends to participate in this Notice Inviting Tender</li> <li>ix. <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 Accepting Authority 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.</li> <li>x. <b>Market Rate</b> shall be the rate as decided by the Engineer-in Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus 15% all overheads and profits. The agency has to submit GST bills of materials along with analysis of rates.</li> </ol> <p><b>Schedule(s)</b> referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government (DSR 2021/2023/2025, PWD SSR 2021-2022 for Civil and DSR 2025 for E&amp;M) here under, with the amendments thereto issued up to the date of receipt of the tender.</p>
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		<p>xi. <b>District Specifications</b> means the specifications followed by the State Government in the area where the work is to be executed.</p> <p>xii. The <b>Contractor/Successful Bidder</b> shall mean the firm or agency whose bid has been accepted by WAPCOS.</p> <p>xiii. Consultant shall mean any consultant nominated by WAPCOS</p> <p>xiv. <b>Contract value</b> means the value of the entire work as stipulated in the work order and agreement.</p> <p>xv. <b>Date of commencement of work:</b> The date of commencement of work shall be the date of start within 7 days after award of work 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.</p>
<b>Scope and Performance</b>	3.	Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
	4.	Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
	5.	The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, (Not Applicable) and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
<b>Works to be carried out</b>	6.	The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and 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.
<b>Sufficiency of Tender</b>	7.	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the (Not Applicable) 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.
<b>Discrepancies and Adjustment of Errors</b>	8.	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

	8.1	<p>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: -</p> <ol style="list-style-type: none"> <li>i. WAPCOS and ESIS GOA Agreement and terms and conditions lay over by ESIS GOA time to time. It is attached as Annexure.</li> <li>ii. Letter of Award, along with statement of agreed variation and its enclosures, if any.</li> <li>iii. Special Condition of Contract</li> <li>iv. Scope of Work</li> <li>v. Description of Schedule of Quantities/ Components.</li> <li>vi. Particular Specification and Special Condition, if any.</li> <li>vii. General Condition of Contract</li> <li>viii. Drawings if any.</li> <li>ix. CPWD / MoRTH Specifications if any.</li> <li>x. Indian Standard Specifications of B.I.S.</li> </ol>
	8.2	<p>If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.</p>
	8.3	<p>Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.</p>
<p><b>Signing of Contract</b></p>	9.	<p>The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 7 days from the stipulated date of start of the work, sign the contract consisting of:-</p> <ol style="list-style-type: none"> <li>i. The notice inviting tender, all the documents including drawings, if any, forms the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.</li> <li>ii. Additional Conditions of Contract consisting of: <ol style="list-style-type: none"> <li>a) Various standard clauses with corrections up to the date stipulated in Additional Conditions of Contract along with annexures thereto.</li> <li>b) Safety Code.</li> <li>c) Model Rules for the protection of health, sanitary arrangements for workers employed WAPCOS or its contractors.</li> <li>d) Contractor's Labour Regulations.</li> <li>e) List of Acts and omissions for which fines can be imposed.</li> </ol> </li> <li>iii. No payment for the work done will be made unless contract/ agreement is signed by the contractor.</li> <li>iv. The contract (and the rights and obligations arising out of it) between WAPCOS and the bidder/contractor shall be independent of the contract/Agreement (and the rights and obligations arising out of it) between WAPCOS and ESIS GOA and no contractual relation of any kind exist between and the Contractor by virtue of this NIT/bidding. This condition</li> </ol>

	should supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.
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### 3.0 CLAUSES OF CONTRACT

#### CLAUSE 1: PERFORMANCE GUARANTEE

- i. **The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the tendered amount** (This guarantee shall be in banker's cheque of any scheduled bank/DD/PBG of any scheduled bank/pay order of any scheduled bank (in case bank guarantee is less than Rs.10000/-) or government securities or fixed deposit receipts or bank guarantee of any scheduled bank or in accordance with the prescribed form) 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 7 days period 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 of 7 days on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in Charge. However, in case last day of submission of PG happens to be a bank holiday the last day of submission shall be the next working day.
- ii. **The Performance Guarantee shall be valid up to the stipulated date of completion plus 60 days beyond that.** In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.
- iii. The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which WAPCOS is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
  - a. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
  - b. Failure by the contractor to pay 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.
- iv. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full.
- v. The Performance Guarantee shall be returned to the Contractor soon after the completion of works and issuance of the completion certificate.

#### CLAUSE 1A: RECOVERY OF SECURITY DEPOSIT

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit WAPCOS at the time of making any payment to him for work done under the contract to deduct a

sum at the rate of 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the contract value of the work. This deduction shall be in addition to the 5% performance security submitted. Such deductions will be made and held by WAPCOS by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above, in addition to the performance guarantee in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the WAPCOS as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the WAPCOS to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising therefrom, or from any sums which may be due to or may become due to the contractor by WAPCOS on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks endorsed in favour of WAPCOS LIMITED, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills and the final bill of the contractor at the rates mentioned above.

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

The Security Deposit shall be released after successful completion of defect liability period in ESIS GOA for the above said works and period.

**The defect liability period shall be one year.**

## **CLAUSE 2: COMPENSATION FOR DELAY**

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or justified extended date of completion as per clause 5 (excluding any extension under Clause 5,51 as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of Tendered Value of the work for every completed day month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

- (i) Compensation for delay of work @ 1.0% of the Tendered Value per week of delay (to be computed on per day basis). Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % of the Tendered Value of work or of the Tendered Value of the Sectional part of work as mentioned in Schedule 'F' for which a separate period of completion is originally given.

In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extended period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub clause 5.2, the contractor shall be liable to pay compensation for such delay.

Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/services. This is without prejudice to right of action by the Engineer in Charge under clause 3 for delay in performance and claim of compensation under that clause

In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in Schedule F, after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after of determination of contract.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor does not achieve a particular milestone mentioned in schedule F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied as above With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount

### **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 within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
- 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.
- viii. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- ix. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- x. If the contractor assigns, 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 (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the WAPCOS.
- b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to

another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.

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

**CLAUSE 3A**

In case, the work cannot be started within 15 days due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract. 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 Guarantee of the contractor shall be refunded within following time limits:

- |  |   |         |
|--|---|---------|
| a) Contract value of work is up to Rs. 45 lac                                    | - | 15 days |
| b) If the Contract value of work is more than Rs. 45 lac and up to Rs. 2.5 Crore | - | 21 days |
| c) If the Contract value of work exceeds Rs. 2.5 Crore                           | - | 30 days |

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

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

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

The time allowed for execution of the Works as mentioned in NIT or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works

shall commence within 1 days or from the date of handing over of the site whichever is earlier. 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 guarantee absolutely.

**5.1** As soon as possible after the Contract is concluded, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the WAPCOS. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Additional Conditions of Contract.

- (a) Project Management shall be done by using project management software for works costing more than Rs. 5 Crore.
- (b) The project management shall be done using M.S. Project software for works costing more than Rs. 5 Crore and up to Rs. 20 Crore.
- (c) For works costing more than Rs. 20 Crore, project management shall be done using Primavera Software.

## **PROGRAMME CHART**

i) The Contractor shall prepare an integrated programme chart in MS Project/Primavera software for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfilment of the programme within the stipulated period or earlier and submit the same for approval to the Engineer-in- Charge within ten days of award of the contract. A recovery of Rs. 2500/- (for works costing up to Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay in submission of the above programme.

- (i) The programme chart should include the following:
  - (a) Descriptive note explaining sequence of the various activities.
  - (b) Network (PERT / CPM / BAR CHART).
  - (c) Programme for procurement of materials by the contractor.

Programme of procurement of machinery / equipment's having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor. In addition to above, to achieve the progress of Work as per programme, the contractor must bring at site adequate shuttering material required for cement concrete and R.C.C. works etc. for three floors within one month from the date of start of work till the completion of RCC work as per requirement of work. The contractor shall submit shuttering schedule adequate to complete structure work within laid down physical milestone.

(ii) If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved programme referred above or after rescheduling of milestones, the contractor shall produce a revised programme within 7 (seven) days, showing the modifications

to the approved programme to ensure timely completion of the work. The modified schedule of programme shall be approved by the Engineer in Charge. A recovery of Rs. 2500/- (for works costing upto Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay in submission of the modified programme.

- (ii) The submission for approval by the Engineer-in-Charge of such programme or such particulars shall not relieve the contractor of any of the duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.
- (iii) The contractor shall submit the progress report using MS Project/Primavera software with base line programme referred above for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery Rs. 2500/- (for works costing upto Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay in submission of the monthly progress report.

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

- (i) force majeure, or
- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (v) delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in executing work not forming part of the Contract, or
- (vi) non-availability of stores, which are the responsibility of WAPCOS to supply or
- (vii) non-availability or break down of tools and Plant to be supplied or supplied by WAPCOS or
- (viii) 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 as indicated in Additional Conditions of Contract but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

**5.3** Request for rescheduling of Mile stones 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 authority as indicated in Additional Conditions of Contract. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

**5.4** In any such case the authority as indicated in Additional Conditions of Contract may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Additional Conditions of Contract in writing, within 3 months or 4 weeks of the date of receipt of such request respectively. Non application by the contractor for extension of time/ rescheduling of the milestones shall not be a bar for giving a fair and reasonable extension/ rescheduling of the milestones by the authority as indicated in Additional Conditions of Contract and this shall be binding on the contractor.

**CLAUSE 6: MEASUREMENTS OF WORK DONE**

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

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

All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties. If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the WAPCOS shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

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

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

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

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

**CLAUSE 6A: COMPUTERIZED ELECTRONIC MEASUREMENT BOOK (e-MBs)**

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

All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book/Measurement Sheet 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 Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the WAPCOS a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.

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

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 along with two spare copies of the bill. Thereafter, this bill will be processed by the Engineer-In-Charge.

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

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

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

Engineer-in-Charge or his authorized representative 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**

It is clearly agreed and understood by the contractor that, notwithstanding anything to the contrary that may be stated in the agreement between WAPCOS and the contractor; the contractor shall become entitled to payment for the work subject to the condition that the Contractor completes the work strictly as per specifications and to the subjective satisfaction of ESIS GOA/WAPCOS. The contractor shall not be entitled to claim any compensation/interest from WAPCOS in instances where payment cannot be made to him by WAPCOS due to the above reason and it is reiterated here as in Section IV, 1.0 (15) that no contractual relation of any kind exist between ESIS GOA and the Contractor by virtue of this NIT/bidding.

No payment shall be made for work, estimated to cost Rs. Twenty thousand or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. Twenty thousand, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the WAPCOS in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any,

since the last such payment is less than the amount specified in Additional Conditions of Contract, in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge together with the account of the material issued by the WAPCOS, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge, the period of ten working days will be extended to fifteen working days.

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.

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

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

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

Engineer-in-charge of major or minor component from the next R/A/ final bill due to main contractor as the case may be.

**CLAUSE 8: COMPLETION CERTIFICATE AND COMPLETION PLANS**

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

**CLAUSE 8A: CONTRACTOR TO KEEP SITE CLEAN**

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done: without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either WAPCOS or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days' notice in writing to the contractor.

**CLAUSE 8B: COMPLETION PLANS TO BE SUBMITTED BY THE CONTRACTOR**

The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 2005 and (Part-II External) 1994 as applicable within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs. 15,000 (Rs. Fifteen thousand only) as may be fixed shall be final and binding on the contractor. The contractor shall submit completion plan for water, sewerage and drainage line plan within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, the WAPCOS will get it done through other agency at his cost and actual expenses incurred plus Rs. 15,000/- for the same shall be recovered from the contractor.

**CLAUSE 9: PAYMENT OF FINAL BILL**

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified here-in-under, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Engineer, complete with account of materials issued by the WAPCOS and dismantled materials.

- a) Contract value of work is up to Rs. 45 lac 2 months
- b) If the Contract value of work is more than Rs. 45 lac and up to Rs. 2.5 Crore 3 months
- c) If the Contract value of work exceeds Rs. 2.5 Crore: 6 months

**CLAUSE 9A: PAYMENT OF CONTRACTOR'S BILLS TO BANKS**

Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by WAPCOS or his signature on the bill or other claim preferred against WAPCOS before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial, cooperative or thrift societies or recognized financial institutions any rights or equities vis-à-vis WAPCOS.

**CLAUSE 10: MATERIALS SUPPLIED BY WAPCOS: Not Applicable**

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

The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by WAPCOS.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When

materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

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

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

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor. The contractor shall at his own expense, provide a material testing lab at site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in Additional Conditions of Contract.

**CLAUSE 10B:**

**(i) SECURED ADVANCE ON NON-PERISHABLE MATERIALS:** Not applicable

**(ii) MOBILISATION ADVANCE:** Not applicable

**(iii) PLANT MACHINERY & SHUTTERING MATERIAL ADVANCE:** Not applicable

**(iv) INTEREST & RECOVERY:** Not Applicable

**CLAUSE 10C: PAYMENT ON ACCOUNT OF INCREASE IN PRICE / WAGES DUE TO STATUTORY ORDER:** Not Applicable

**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 WAPCOS PROPERTY**

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as WAPCOS's 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.

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

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications, BSI standards and codes, Indian electricity rule 1956, Indian electricity act 2003 and fire safety regulation pertaining to electric applications. The specification with up to date correction on the last date of submission of tender for work. In case specification of any item is not clear, MoRTH Specification, CPWD specification, Indian standard (IS) IRC (Indian Road Congress) specification, NBPDC specifications with up to date correction slips issued on last date of submission of tender of work is applicable.

The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications specified in Additional Conditions of Contract 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 WAPCOS without any extra expenditure to WAPCOS.

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 Contract 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 Contract 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(a) Deviations, Extra Items and Pricing**

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper rate analysis, for the work and the engineer-in-charge shall within prescribed time limit of the receipt of the claims supported by rate 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. Agency has to submit the GST bill of the material as evident of market rate.

The Preference of Schedule for Civil shall be considered DSR 2023, State SSR 2023 and For Electrical E&M DSR 2025, DSR 2022 and State SSR. Preference for adoption of rates/items shall be as per order: firstly, prevailing DSR items/rates; secondly, State SOR items/rates; and thereafter market rates, wherever applicable. As far as possible, only such approved schedule items shall be considered during execution of the work. In case any item is not available in DSR and State SOR the rates shall be considered only after approval of the Site In-charge of WAPCOS/ESIS. Use of market rate items shall be avoided unless absolutely necessary. In such cases, rates shall be approved as per GFR/CPWD provisions based on CPWD DAR, considering cost of materials, taxes, labour, transportation, etc. at site, along with 15% towards contractor's overheads and profit.

### **12.2(b) Deviations Substituted Items and Pricing.**

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

- (a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

Agency has to submit the GST bill of the material as evident of market rate.

**12.2(c) Deviations, Deviated Quantities, Pricing**

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Additional 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 Engineer-in-Charge shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined. Agency has to submit the GST bill of the material as evident of market rate.

- 12.3** The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Additional Conditions of Contract, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.
- 12.4** The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Engineer-in-charge may authorize consideration of such claims on merits.
- 12.5** For the purpose of operation of 'Additional Condition of Contract', the following works shall be treated as works relating to foundation unless & otherwise defined in the contract:
- i. For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
  - ii. For abutments, piers and well steining: All works up to 1.2 m above the bed level.
  - iii. For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/tanks and other elevated structures: All works up to 1.2 metres above the ground level.
  - iv. For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 metres above the ground level.
  - v. For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
  - vi. For Roads, all items of excavation and filling including treatment of sub base.
- 12.6** Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.
- 12.7** This tender is based upon the estimations on the basis of site conditions (tentative) enclosed with technical specifications and BOQ. WAPCOS Limited reserves the right to vary any individual item to any extent either positive or negative within the scope of work as defined as per the requirement of ESIS GOA/WAPCOS Limited. The decision as to items are within the scope of work shall be of WAPCOS Limited which is final & binding. Therefore in case of variation in quantity as given in BOQ either positive or negative no rate revision is applicable.

In case of New Rate or Price of the Substituted/Extra/deduction items shall be derived from any relevant rates or prices in the Contract. New rate or price of the substituted/Extra/deduction items shall be derived from the Delhi Schedule of Rates -2021/2023/2025 or upto date. In case the rates are not available in DSR, the same shall be derived from the competitive market quotes, obtained by WAPCOS Limited/WAPCOS Limited representative. The contractor's profit and overheads together shall be taken as 15% only.

- 12.8** Contractor shall carry out the extra quantity of work under deviation from the estimated quantity at the rate quoted in the BoQ limited to 25% deviation on each item and for the quantity deviated beyond 25% market rates will be applicable. Execution of such deviation in quantity shall require prior written permission from WAPCOS/ESIS GOA.
- 12.9** Contractor shall submit the detailed work schedule so as to complete the works considering all the field conditions in accordance with the requirement of the engineer-in-charge. Contractor should also strictly adhere to such schedule mutually accepted to complete the total work within the time period mentioned in the contract.

### **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.

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

If contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 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. 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 value of the work.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the 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) 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 Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

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

#### **CLAUSE 15: SUSPENSION OF WORK**

- (i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
  - (a) On account of any default on the part of the contractor or;
  - (b) For proper execution of the works or part thereof for reasons other than the default of the contractor; or
  - (c) For safety of the works or part thereof.The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
- (ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
  - (a) The contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which

a separate period of completion is specified in the contract and of which the suspended work forms a part, and;

- (b) If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in Charge within fifteen days of the expiry of the period of 30 days.
- (iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in subpara (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by 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 15A: COMPENSATION IN CASE DELAY OF SUPPLY OF MATERIAL**

The contractor shall not be entitled to claim any compensation from WAPCOS for the loss suffered by him on account of delay by WAPCOS in the supply of materials in Additional Conditions of Contract where such delay is covered by the difficulties relating to the supply of wagons, force majeure or any reasonable cause beyond the control of the WAPCOS. This clause 15 A will not be applicable for works where no material is stipulated.

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

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the 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 in charge of the work or to the Chief Engineer in charge of Quality Assurance or his subordinate officers or the officers of

the organization engaged by the WAPCOS for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskilful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lacs 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 Additional 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**

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 lakhs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in- Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

The defects liability period will be one years from the date of completion of development and construction works. During this period the Contractor will get the defects rectified without any cost to WAPCOS/ESIS GOA. The Contractor is expected to rectify any defects found in the Works due to defective construction practice or poor quality of work and/or material, for a period of up to 1 years after the completion of work or a period mentioned elsewhere in this contract whichever is higher.

**CLAUSE 18: CONTRACTOR SUPPLY TOOLS & PLANTS ETC.**

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants as specified in Additional Conditions of Contract. 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 portion 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 subsection (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 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 fulfil 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**

- a. The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- b. 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.
- c. 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 unauthorized 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.
- d. (i) 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.  
  
(ii) 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.

- e. 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.
- f. The contractor shall indemnify and keep indemnified WAPCOS against payments to be made under and for the observance of the laws aforesaid and the C.P.W.D. Contractor's Labour Regulations without prejudice to his right to claim indemnity from his subcontractors.
- g. 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.
- h. 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.
- i. The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

**CLAUSE 19C:**

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

**CLAUSE 19D:**

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

- (1) the number of labourers employed by him on the work,
- (2) their working hours,
- (3) the wages paid to them,
- (4) the accidents that occurred during the said 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.200/- 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 19E:**

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

**CLAUSE 19F:**

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 - up to 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.
3. 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 and the same shall be kept at the place of work.

**CLAUSE 19G:**

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.200/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the C.P.W.D. Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules

be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

**CLAUSE 19H:**

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

- (i) 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.
  - a. The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6'x5') adjacent to the hut for each family.
  - b. 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.
  - c. 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 sundried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi 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.
  - a. The contractor(s) shall provide each hut with proper ventilation.
  - b. All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
  - c. 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 19I:**

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. AE/JE will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service Centre, to apprise the residents about the same.

**CLAUSE 19J:**

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy up to 5% of Contract value 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, WAPCOS, 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.

**CLAUSE 19L: Contribution of EPF and ESI**

The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor as per prevailing norms of EPF and ESI.

**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 individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

**CLAUSE 24:**

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

**CLAUSE 25: SETTLEMENT OF DISPUTES & ARBITRATION**

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

**1. GOVERNING LAW, JURISDICTION & WAIVER OF ALTERNATIVE REMEDIES-  
CLAUSE 1**

1.1. **Governing Law:** This Contract shall be governed and interpreted strictly in accordance with the laws of India. No foreign law, conflict-of-laws principle, or external rule shall apply, unless expressly mandated by a funding Curator agency and separately approved in writing by the Competent Authority.

1.2. **Exclusive Jurisdiction:** Subject to prior exhaustion of the internal dispute-resolution mechanisms stipulated in this Contract, the Parties agree that all suits, actions, or proceedings arising out of or in connection with this Contract, including its formation, validity, performance, breach, or termination, shall be instituted exclusively before the competent civil courts at Delhi, being the place where the Company's Registered Office is situated, to the exclusion of all other courts. The Parties irrevocably waive any objection relating to forum non conveniens, place of suing, or inconvenience.

1.3. **Exclusion of arbitration & consensual ADR:** The Parties unequivocally agree that no dispute shall be referred to arbitration, conciliation, expert determination, Dispute Review Board, or any other form of consensual alternative dispute resolution, except where statutorily mandated (e.g., MSMED Act). This exclusion is without prejudice to the mandatory pre-litigation mediation process stipulated in Clause 2.3 below.

1.4. **The parties expressly agree** that there is no arbitration agreement between them and they irrevocably waive any right to invoke arbitration under the Arbitration and Conciliation Act, 1996 or to constitute an arbitral tribunal in any manner whatsoever.

**2. STRUCTURED INTERNAL DISPUTE RESOLUTION MECHANISM (SIDRM)**

**2.1. Tier-I: Dispute resolution by Engineer-in-Charge (EIC)**

2.1.1. Notice of Dispute: Any Dispute must be notified in writing to the EIC within 21 days from the date on which the aggrieved Party became, or ought reasonably to have become, aware of the event giving rise to the Dispute.

2.1.2. Contents of Notice: The notice shall contain i ) complete facts and chronology; (ii) precise contractual clauses invoked; (iii) a quantified claim with calculations; and (iv) full supporting records such as drawings, DPRs, MBs, photographs, test results, correspondence, and site registers. Vague, omnibus, or un-particularised notices shall be summarily rejected without prejudice to WAPCOS.

2.1.3. EIC's Decision: The EIC shall examine the matter, including through joint site verification or expert inputs as needed, and shall issue a speaking order within 30 days of receiving a complete notice.

2.1.4. Binding Effect: The EIC's decision shall bind both Parties unless a written request seeking escalation to Tier-II is filed within 15 days from the date of issuance of EIC's decision. Absence of a timely request shall render the EIC decision final.

## 2.2. Tier-II: Departmental Review Committee (DRC)

2.2.1. Constitution: A standing Departmental Review Committee, consisting of three senior officers including two Technical and one Finance/ Account officer, shall independently review disputes escalated from Tier-I.

2.2.2. Review Process: The DRC shall conduct a record-based administrative review of the Tier-I file, supplemented by written submissions from the Curator. The committee may permit oral hearings if it deems them necessary for a fair decision.

2.2.3. Decision & Finality: The DRC shall deliver reasoned determination within 30 days of referral, extendable once by 30 days for, if resolution takes time, with reasons recorded. This determination shall constitute the final administrative decision of WAPCOS.

## 2.3. MANDATORY PRE-LITIGATION MEDIATION

2.3.1. Obligation to Mediate: Following the DRC decision (or deemed decision), either Party may initiate pre-litigation mediation. Where the dispute qualifies as commercial dispute' under the Commercial Courts Act, 2015, this mediation shall satisfy the mandatory pre-litigation requirement under Section 12A of the said Act.

2.3.2. Mediation Parameters: Mediation shall be conducted by a mediator empanelled with the High Court or a Government-notified mediation service provider in accordance with the Mediation Act, 2023. The timelines and extension provisions stipulated in the Act shall apply.

2.3.3. Approval of Settlement: Any mediated settlement agreement shall be subject to final written approval and execution by the Competent Authority of WAPCOS. The mediator shall be informed at the outset that the authorized representative of WAPCOS does not have the inherent power to bind WAPCOS to a settlement without such approval. If such approval is not granted within 30 days of the settlement terms being presented, the settlement shall be deemed not concluded, and the mediation shall be treated as unsuccessful.

### **3. CIVIL COURT JURISDICTION & CONSEQUENCES OF BREACH**

3.1. **Exhaustion of Remedies:** A Party may file a civil suit only after (a) obtaining a DRC decision or deemed decision, and (b) participating in the mandatory mediation process and obtaining a failure report.

3.2. **Mandatory Pleadings:** Every plaint shall specifically demonstrate compliance with Tier-I, Tier-II, and Tier-III requirements. Failure to do so shall render the plaint liable to rejection.

3.3. Any attempt to initiate arbitration or file a civil suit without first exhausting the mandatory tiers stipulated above shall constitute a material breach of contract. WAPCOS shall be entitled to seek appropriate relief from the court, including but not limited to an injunction to restrain such proceedings, and to recover all associated costs and expenses

### **4. GENERAL PROVISIONS**

4.1. **Severability:** If any portion of this Clause is invalidated by a court, the remaining parts shall remain in force.

4.2. **Amendment:** This Clause may be amended only by a written instrument signed by the CMD or an expressly authorized officer of WAPCOS.

4.3. Failure to continue performance shall constitute a material breach entitling WAPCOS to terminate the Contract without prejudice to its other right.

### **CLAUSE 26: CONTRACTOR INDEMNIFY WAPCOS AGAINST PATENT RIGHTS**

The contractor shall fully indemnify and keep indemnified the WAPCOS 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 WAPCOS 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 WAPCOS 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: LUMP SUM 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 finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the 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-in-Charge 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) WAPCOS 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 WAPCOS or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or WAPCOS 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 WAPCOS 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 WAPCOS will be kept withheld or retained as such by the Engineer-in-Charge or the WAPCOS 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: EMPLOYMENT OF COAL MINING OR CONTROLLED AREA LABOUR NOT PERMISSIBLE:** Not applicable

**CLAUSE 31: UNFILTERED WATER SUPPLY**

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

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

**CLAUSE 31A: WATER SUPPLY, IF AVAILABLE:** Not applicable

**CLAUSE 32: ALTERNATE WATER ARRANGEMENTS:** Not applicable

**CLAUSE 33: RETURN OF SURPLUS MATERIALS:** Not applicable

**CLAUSE 34: HIRE OF PLANT & MACHINERY:** Not applicable

**CLAUSE 35: CONDITION RELATING TO USE OF ASPHALTIC MATERIALS**

- (i) The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the tar or bitumen used.
- (ii) The contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula, before the process of painting is started and shall hypothecate it to the Engineer-in-Charge. If any bitumen or tar remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material return to the contractors. Although the materials are hypothecated to WAPCOS, the contractor undertakes the responsibility for their proper watch, safe custody and protection

against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in- Charge in writing.

- (iii) The contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work and the portion of the security deposit relating to asphaltic work shall be refunded after the expiry of this period.

### **CLAUSE 36: EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES**

Contractors Superintendence, Supervision, Technical Staff & Employees

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

All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s) The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in- Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/ checked measurements/ test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Additional Conditions of Contract and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical Principal technical

representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on account bill final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- (ii) The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work. The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

**CLAUSE 37: LEVY / TAXES PAYABLE BY CONTRACTOR**

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

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

**CLAUSE 38: CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECEIPT OF TENDERS**

- (i) All tendered rates shall be exclusive of all taxes and levies including Goods & Service Tax payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the 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.
- (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 WAPCOS 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, give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

**CLAUSE 39: TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR**

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

**CLAUSE 40: 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 grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

**CLAUSE 41: NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEAR OF RETIREMENT**

No engineer of gazetted rank or other gazetted officer employed in engineering 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 42: RETURN OF MATERIALS & RECOVERY FOR MATERIAL ISSUED**

Not applicable

**CLAUSE 43: 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 the 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 by the Engineer-In-Charge up to Rs. 5,000/- and by the WAPCOS 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. 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 44: 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 45: RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE**

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

#### **CLAUSE 46: INSURANCE**

##### **1. Requirements**

Before commencing execution of works, unless stated otherwise in the Additional Conditions of Contract, 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 may be specified by the employer in the Additional Conditions of Contract.

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

The policy referred to under sub-clause 46(1) 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. Currency of Policy**

The policies shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period. The contractor shall, whenever called upon, produce to the engineer or his representative the various insurance policies obtained by him as also the rates of premia and the premia paid by him to ensure that the policies indeed continue to be in force. If the contractor fails to effect or keep in force or provide adequate cover in the insurance policies mentioned in the sub clause 46(1) or any other insurance he might be required to effect under the contract, then in such cases, the employer may effect and keep in force any such insurance or further insurance and the cost and expenses incurred by him in this regard shall be deductible from payments due to the contractor or from the contractor's performance security.

## **CLAUSE 47: CONDITIONS SPECIFIC TO GREEN BUILDINGS PRACTICES CLAUSE**

The contractor shall strictly adhere to the following conditions as part of his contractual obligations:

### **1. SITE**

- 1.1 The contractor shall ensure that adequate measures are taken for the prevention of erosion of the top soil during the construction phase. The contractor shall implement the Erosion and Sedimentation Control Plan (ESCP) provided to him by the Engineer-in-charge as part of the larger Construction Management Plan (CMP). The contractor shall obtain the Erosion and Sedimentation Control Plan (ESCP) Guidelines from the Engineer-in-charge and then prepare "working plan" for the following month's activities as a CAD drawing showing the construction management, staging & ESCP. At no time soil should be allowed to erode away from the site and sediments should be trapped where necessary.
- 1.2 The contractor shall ensure that all the top soil excavated during construction works is neatly stacked and is not mixed with other excavated earth. The contractors shall take the clearance of the architects / Engineer-in-charge before any excavation. Top soil should be stripped to a depth of 20 cm (centimetres) from the areas to be disturbed, for example proposed area for buildings, roads, paved areas, external services and area required for construction activities etc. It shall be stockpiled to a maximum height of 40 cm in designated areas, covered or stabilised with temporary seeding for erosion prevention and shall be reapplied to site during plantation of the proposed vegetation. Top soil shall be separated from subsoil, debris and stones larger than 50 mm (millimetre) diameter. The stored top soil may be used as finished grade for planting areas.

- 1.3 The contractor shall carry out the recommendations of the soil test report for improving the soil under the guidance of the Engineer-in-charge who would also advise on the timing of application of fertilizers and warn about excessive nutrient levels.
- 1.4 The contractor shall carry out post-construction placement of topsoil or other suitable plant material over disturbed lands to provide suitable soil medium for vegetative growth. Prior to spreading the topsoil, the sub-grade shall be loosened to a depth of 50mm to permit bonding. Topsoil shall be spread uniformly at a minimum compacted depth of 50mm on grade 1:3 or steeper slopes, a minimum depth of 100mm on shallower slopes. A depth of 300mm is preferred on relatively flatter land.
- 1.5 The Contractor should follow the construction plan as proposed by the Engineer-in-charge to minimize the site disturbance such as soil pollution due to spilling. Use staging and spill prevention and control plan to restrict the spilling of the contaminating material on site. Protect top soil from erosion by collection storage and reapplication of top soil, constructing sediment basin, contour trenching, mulching etc.
- 1.6 No excavated earth shall be removed from the campus unless suggested otherwise by Engineer-in-charge. All subsoil shall be reused in backfilling/landscape, etc as per the instructions of the Engineer-in-charge
- 1.7 The contractor shall not change the natural gradient of the ground unless specifically instructed by the architect's / landscape consultant. This shall cover all natural features like water bodies, drainage gullies, slopes, mounds, depressions, rocky outcrops, etc. Existing drainage patterns through or into any preservation area shall not be modified unless specifically directed by the Engineer-in-charge.
- 1.8 The contractor shall not carry out any work which results in the blockage of natural drainage.
- 1.9 The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer-in-charge
- 1.10 Contractor shall reduce pollution and land development impacts from automobiles use during construction.
- 1.11 Overloading of trucks is unlawful and creates and erosion and sedimentation problems, especially when loose materials like stone dust, excavated earth, sand etc. are moved. Proper covering must take place. No overloading shall be permitted.

## **2.CONSTRUCTION PHASE AND WORKER FACILITIES**

- 2.1 The contractor shall specify and limit construction activity in pre-planned/ designated areas and shall start construction work after securing the approval for the same from the Engineer-in-charge. This shall include areas of construction, storage of materials, and material and personnel movement.
- 2.2 Preserve and Protect Landscape during Construction:
  - a) The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots should be prevented during trenching, placing backfill, driving or

parking heavy equipment, dumping of trash, oil, paint, and other materials detrimental to plant health. These activities should be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not to be permitted.

- b) The contractor shall take steps to protect trees or saplings identified for preservation within the construction site using tree guards of approved specification.
- c) The contractor shall conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity. Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) proposed by the Engineer-in-charge. All the existing trees should be preserved, if not possible than compensate the loss by re-planting trees in the proportion of 1:3.
- d) The contractor shall avoid cut and fill in the root zones, through delineating and fencing the drip line (the spread limit of a canopy projected on the ground) of all the trees or group of trees. Separate the zones of movement of heavy equipment, parking, or excessive foot traffic from the fenced plant protection zones.
- e) The contractor shall ensure that maintenance activities shall be performed as needed to ensure that the vegetation remains healthy. The preserved vegetated area shall be inspected by the Engineer-in-charge at regular intervals so that they remain undisturbed. The date of inspection, type of maintenance or restorative action followed shall be recorded in the logbook.

2.3 Contractor shall be required to develop and implement a waste management plan, quantifying material diversion goals. He shall establish goals for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals. A project-wide policy of “Nothing leaves the Site” should be followed. In such a case when strictly followed, care would automatically be taken in ordering and timing of materials such that excess doesn’t become “waste”. The Contractor’s ingenuity is especially called towards meeting this prerequisite/ credit (GRIHA). Consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable material, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that diversion may include donation of materials to charitable organizations and salvage of materials on-site.

2.4 Contractor shall collect all construction waste generated on site. Segregate these wastes based on their utility and examine means of sending such waste to manufacturing units which use them as raw material or other site which require it for specific purpose. Typical construction debris could be broken bricks, steel bars, broken tiles, spilled concrete and mortar etc.

2.5 The contractor shall provide clean drinking water for all workers.

2.6 The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard. Adequate toilet facilities shall be provided for the workman within easy access of their place of work. The total no. to be provided shall not be less than 1 per 30 employs in any one shift. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and

falling objects. Toilet facilities shall be maintained in a sanitary condition. A sufficient quantity of disinfectant shall be provided. Natural or artificial illumination shall be provided.

2.7 The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, gravel pit, and water spraying. Contractor shall ensure the following activities to prevent air pollution during construction:

- a) Clear vegetation only from areas where work will start right away
- b) Vegetate / mulch areas where vehicles do not ply.
- c) Apply gravel / landscaping rock to the areas where mulching / paving is impractical
- d) Identify roads on-site that would be used for vehicular traffic. Upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral types that make up the surface & base. Add surface gravel to reduce source of dust emission. Limit amount of fine particles (smaller than 0.075mm) to 10 – 20%
- e) Water spray, through a simple hose for small projects, to keep dust under control. Fine mists should be used to control fine particulate. However, this should be done with care so as not to waste water. Heavy watering can also create mud, which when tracked onto paved public roadways, must be promptly removed. Also, there must be an adequate supply of clean water nearby to ensure that spray nozzles don't get plugged. Water spraying can be done on:
  - i)Any dusty materials before transferring, loading and unloading
  - ii)Area where demolition work is being carried out
  - iii)Any un-paved main haul road
  - iv)Areas where excavation or earth moving activities are to be carried out

The contractor shall ensure that the speed of vehicles within the site is limited to 10 km/hr.

- f) All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust / particulate emissions.
- g) Spills of dirt or dusty materials will be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained / cleaned up immediately before they can infiltrate into the soil / ground or runoff in nearby areas
- h) Provide hoardings of not less than 3m high along the site boundary, next to a road or other public area
- i) Provide dust screens, sheeting or netting to scaffold along the perimeter of the building  
Cover stockpiles of dusty material with impervious sheeting
- j) Cover dusty load on vehicles by impervious sheeting before they leave the site

2.8 Contractor shall be required to provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. He shall coordinate the size and functionality of the recycling areas with the anticipated collections services for glass, plastic, office paper, newspaper, cardboard, and organic wastes to maximize the effectiveness of the dedicated areas. Consider employing cardboard balers, aluminium can

- crushers, recycling chutes, and collection bins at individual workstations to further enhance the recycling program.
- 2.9 The contractor shall ensure that no construction leachate (Ex: cement slurry), is allowed to percolate into the ground. Adequate precautions are to be taken to safeguard against this including, reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).
- 2.10 Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.
- 2.11 The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 \_Constructional practices and safety, 2016, National Building code of India, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first-aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to casualties. A telephone may be provided to first-aid assistant with telephone numbers of the hospitals displayed. Complete reports of all accidents and action taken thereon shall be forwarded to the competent authorities.
- 2.12 The contractor shall ensure the following activities for construction workers safety, among other measures:
- a) Guarding all parts of dangerous machinery.
  - b) Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
  - c) Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
  - d) Provide protective equipment; helmets etc.
  - e) Provide sufficient and suitable light for working during night time.
- 2.13 Adopt additional best practices, prescribed norms in construction industry.
- 2.14 The storage of material shall be as per standard good practices as specified in Part 7, Section 2 – Storage, Stacking and Handling practices, NBC 2016 and shall be to the satisfaction of the Engineer-in-charge to ensure minimum wastage and to prevent any misuse, damage, inconvenience or accident. Watch and ward of the Contractor's materials shall be his own responsibility. There should be a proper planning of the layout for stacking and storage of different materials, components and equipment with proper access and proper manoeuvrability of the vehicles carrying the materials. While planning the layout, the requirements of various materials, components and equipment at different stages of construction shall be considered. The Owner shall not take any responsibility on any account.
- 2.15 The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilisation of these bins for any solid waste generated during the construction. The contractor shall ensure that the site and the workers facilities are kept litter free. Separate bins should be provided for plastic, glass, metal, biological and paper waste and labelled in both Hindi and English.
- 2.16 The contractor shall prepare and submit 'Spill prevention and control plans' before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel

trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, and petroleum products.

- 2.17 Contractor shall collect the relevant material certificates for materials with high recycled (both post-industrial and post-consumer) content, including materials for structural use like TMT steel rolled with high percentage of recycled steel, and RMC mix with fly-ash etc.
- 2.18 Contractor shall collect the relevant material certificates for rapidly renewable materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, strawboard and cork.
- 2.19 Contractor shall adopt an IAQ (Indoor Air Quality) management plan to protect the system during construction, control pollutant sources, and interrupt pathways for contamination. He shall sequence installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. He shall also protect stored on-site or installed absorptive materials from moisture damage.
- 2.20 The contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. This shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.
- 2.21 Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well-being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers used must not exceed the VOC content limits mentioned below:

Paints

Non-flat - 150 g/L

Flat (Mat) - 50 g/L

Anti-corrosive/ anti rust - 250 g/L

Coatings

Clear wood finishes

Varnish - 350 g/L

Lacquer - 550 g/L

Floor coatings - 100 g/L

Stains - 250 g/L

Sealers

Waterproofing sealer - 250 g/L

Sanding sealer - 275 g/L

Other sealers - 200 g/L

The VOC (Volatile Organic Compounds) content of adhesives and sealants used must be less than VOC content limits mentioned:

Architectural Applications VOC Limit (g/l less water)

Indoor Carpet adhesives - 50

Carpet Pad Adhesives - 50

Wood Flooring Adhesive - 100

Rubber Floor Adhesives - 60

Sub Floor Adhesives - 50

Ceramic Tile Adhesives - 65

VCT and Asphalt Tile adhesives - 50

Dry Wall and Panel Adhesives - 50

Structural Glazing Adhesives - 100

Multipurpose Construction Adhesives - 70

Substrate Specific Application VOC Limit (g/l less water)

Metal to Metal - 30

Plastic Foams - 50

Porous material (except wood) - 50

Wood - 30

Fiber Glass – 80

- 2.22 Wherever required, Contractor shall meet and carry out documentation of all activities on site, supplementation of information, and submittals in accordance with GRIHA program standards and guidelines. Towards meeting the aforementioned building environmental rating standard(s) expert assistance shall be provided to him up on request.
- 2.23 Water Use during Construction: Contractor should spray curing water on concrete structure and shall not allow free flow of water. After liberal curing on the first day, all the verticals surfaces of concrete structures should be painted with curing chemical to save water nothing extra shall be paid. Concrete structures should be kept covered with thick cloth/gunny bags and water should be sprayed on them. Contractor shall do water ponding on all sunken slabs using cement and sand mortar.
- 2.24 The Contractor shall remove from site all rubbish and debris generated by the Works and keep Works clean and tidy throughout the Contract Period. All the serviceable and nonservice able (malba) material shall be segregated and stored separately. The malba obtained during construction shall be collected in well-formed heaps at properly selected places, keeping in a view safe condition for workmen in the area. Materials which are likely to cause dust nuisance or undue environmental pollution in any other way, shall be removed from the site at the earliest and till then they shall be suitable covered. Glass & steel should be dumped or buried separately to prevent injury. The work of removal of debris should be carried out during day. In case of poor visibility artificial light may be provided.

#### 2.25 DOCUMENTATION

- a) The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer-in-charge on a monthly basis:
- i) Water consumption in litres
  - ii) Electricity consumption in 'kwh' units
  - iii) Diesel consumption in litres
  - iv) Quantum of waste generated at site and the segregated waste types divided into inert, chemical and hazardous wastes.
  - v) Digital photo documentation to demonstrate compliance of safety guidelines as specified here.
- b) The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer-in-charge on a weekly basis:
- i) Quantities of material brought into the site, including the material issued to the contractor by the client.
  - ii) Quantities of construction debris (if at all) taken out of the site
  - iii) Digital photographs of the works at site, the worker's facilities, the waste and other material storage yards, pre-fabrication and block making works, etc as guided by the Engineer-in-charge.
- c) The contractor shall submit one document after construction of the buildings, a brief description along with photographic records to show that other areas have not been disrupted during construction. The document should also include brief explanation and photographic records to show erosion and sedimentation control measures adopted. (Document CAD drawing showing

- site plan details of existing vegetation, existing buildings, existing slopes and site drainage pattern, staging and spill prevention measures, erosion and sedimentation control measures and measures adopted for top soil preservation during construction.
- d) The contractor shall submit to the Engineer-in-charge after construction of the buildings, a detailed as built quantification of the following: (i) Total materials used, ii) Total top soil stacked and total reused iii) Total earth excavated, iv) Total waste generated, v) Total waste reused, vi) Total water used, vii) Total electricity, and viii) Total diesel consumed.
  - e) The contractor shall submit to the Engineer-in-charge, before the start of construction, a site plan along with a narrative to demarcate areas on site from which top soil has to be gathered, designate area where it will be stored, measures adopted for top soil preservation and indicate areas where it will be reapplied after construction is complete.
  - f) The contractor shall submit to the Engineer-in-charge, a detailed narrative (not more than 250 words) on provision for safe drinking water and sanitation facility for construction workers and site personnel.
  - g) The contractor shall, at the end of construction of the buildings, submit to the Engineer-in-charge, submit following information, for all material brought to site for construction purposes, including manufacturer's certifications, verifying information, and test data, where Specifications sections require data relating to environmental issues including but not limited to:
    - i) Source of products: Supplier details and location of the supplier and brand name.
    - ii) Project Recyclability: Submit information to assist Owner and Contractor in recycling materials involved in shipping, handling, and delivery, and for temporary materials necessary for installation of products.
    - iii) Recycled Content: Submit information regarding product post-industrial recycled and post-consumer recycled content. Use the "Recycled Content Certification Form", to be provided by the Commissioning Authority appointed for the Project.
    - iv) Product Recyclability: Submit information regarding product and product's component's recyclability including potential sources accepting recyclable materials.
    - v) Clean tech: Provide pollution clearance certificates from all manufacturers of materials
    - vi) Indoor Air quality and Environmental Issues: Submit following certificates:
      - a. Certifications from manufacturers of Low VOC paints, adhesives, sealant and polishes used at this particular project site.
      - b. Certification from manufacturers of composite wood products/agro fibre products on the absence of added urea formaldehyde resin in the products supplied to them to this particular site.
      - c. Submit environmental and pollution clearance certificates for all diesel generators installed as part of this project.
  - h) Provide total support to the Engineer-in-charge appointed by the owner in completing all Green Building Rating related formalities, including signing of forms, providing signed letters in the contractor's letterhead.

## 2.26 EQUIPMENT

- a) To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval and as per the specifications of the architects.
- b) All lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL/LED bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed.

The contractor is expected to go through all other conditions of the GRIHA rating stipulations, which can be provided to him by the architects. Failure to adhere to any of the above-mentioned items, without necessary clearances from the architects and the Engineer-in-charge, shall be deemed as a violation of contract and the contractor shall be held liable for penalty as determined by the architects.

## CLAUSE 48: PAYMENT

### 1. Contractor's Application for Payment

From the date of issue of the Notice to Proceed, on the 5th (fifth) Business Day of any month, the Contractor may submit a Request for Payment, to WAPCOS Limited Representative in respect of the preceding month.

Within each Request for Payment the Contractor shall show separately:

- (i) The amounts which the Contractor claims to be payable as the cost of the Works completed during that month; and
- (ii) The cumulative amount of all prior payments made by WAPCOS Limited; and
- (iii) Any amounts to which the Contractor considers are due and payable to it in accordance with the provisions of the Contract.

### The Contractor's Request for Payment shall:

- (i) Be prepared on forms in the form and in a number advised by WAPCOS Limited Representative; and
- (ii) Be accompanied by:
  - (a) Copy of relevant records of measurement of works, jointly taken and signed by both the parties;
  - (b) A status report describing in such detail as may reasonably request, the percentage of any uncompleted Milestone Event for the month in question and the work to be undertaken by the Contractor prior to the next Request for Payment;
  - (c) Certification by WAPCOS Limited Representative confirming that the Milestone Events referred to in the Request for Payment have been achieved.
  - (d) Confirmation by the Contractor of any amounts due and owing from the Contractor to WAPCOS Limited pursuant to the Contract;
  - (e) The Contractor's certification that the quality of all completed Works accords with the requirements of the Contract;

- (f) The Contractor's certification that each obligation, item of cost or expense mentioned in that Request for Payment has not been the basis of any previous payment.
- (g) The Contractor's certification that it has reviewed all financial and budget data contained in the Request for Payment;
- (h) The Contractor's certification that the quality of all completed Works accords with the requirements of the Contract;
- (i) The Contractor's certification that each obligation, item of cost or expense mentioned in that Request for Payment has not been the basis of any previous payment; and
- (j) The Contractor's certification that each Subcontractor who performed part of the Works which was included in the immediately preceding Certificates of Payment was paid all amounts then due to it for such Works
- (k) The Contractor providing evidence of the validity of the Contractor's Insurances.

### **3. Certificates of Payment**

Within [14 (fourteen)] Business Days of receipt of the Contractor's Request for Payment under Clause 48(2) [Contractor's Application for Payment], WAPCOS Limited and WAPCOS Limited Representative shall review such request and, shall issue to the Contractor, a Certificate of Payment certifying what amounts WAPCOS Limited shall pay. Each Certificate of Payment shall be for an amount which in the opinion of WAPCOS Limited, is the basis of the Request for Payment and pursuant to the Contract, is properly due to the Contractor (the "Gross Certifiable Amount") less (i) the cumulative amounts of payments previously certified as due to the Contractor, (ii) any deduction on account of recovery of Advance Payment, and (iii) Retention Amount.

No sum shall be included in the Certificate of Payment in respect of Materials yet to be incorporated into the Permanent Works unless the WAPCOS Limited Representative is satisfied that:

- (i) such Materials have been properly acquired and properly and not prematurely delivered to the Project Site;
- (ii) such Materials have been properly stored on the Project Site and fully protected against loss, damage or deterioration;
- (iii) the Contractor's records of the requisitions, orders, receipts and use of any Materials are kept in a form approved by the WAPCOS Limited Representative, and such records are available for inspection by the WAPCOS Limited Representative; and
- (iv) The Contractor has submitted a proper statement of the cost of acquiring the Materials together with such documents as may be required for evidencing such cost.

Without prejudice to any other rights of WAPCOS Limited to withhold payment to the Contractor, WAPCOS Limited may withhold from any payment due to the Contractor such amount as WAPCOS Limited deems reasonably necessary or appropriate:

- (i) if in the opinion of the WAPCOS Limited Representative the progress of the Works at the time of the Request for Payment is behind the progress of the Works as set out in the Programme; and/or
- (ii) to protect it from any losses, expenses, costs or liability because of any one or more of the following reasons:
  - (a) defects and deficiencies in any Works, whether or not payment has been made;

- (b) unsatisfactory performance of the Contract;
- (c) the filing of third party claims relating to the Works or any of its commitment parts for which the Contractor is liable;
- (d) the Contractor's failure to make payments to Subcontractors;
- (e) failure by the Contractor to provide or procure replacement Performance Security in accordance with the Contract;
- (f) failure by the Contractor to provide evidence of insurance coverage in accordance with the Contract;
- (g) reasonable evidence that Completion will not occur by the Time for Completion;
- (h) any overpayments made by WAPCOS Limited with respect to a previous payment;
- (i) failure by the Contractor to submit a properly updated monthly Programme and
- (j) failure by the Contractor to provide satisfactory evidence that the costs of all labour and Materials and other obligations arising out of the Contract have been fully satisfied and discharged by the Contractor and/or to otherwise fail to submit adequate supporting documentation for any Request for Payment.

Any Provisional Sum Works shall only be executed in whole or part upon the WAPCOS Limited Representative's instruction. If the WAPCOS Limited Representative issues no such instruction, the Provisional Sum Works shall not form part of the Works and the Contractor shall not be entitled to payment for it. The Contractor shall be deemed to have allowed the necessary time and resources to enable design and Execution of the Provisional Sum Works in so far as the scope and nature of the Provisional Sum Works was reasonably foreseeable.

The Contractor shall be entitled only to such amount in respect of the Provisional Sum Works as the WAPCOS Limited Representative determines in accordance with this Clause 48(3). The WAPCOS Limited Representative shall notify the Contractor of any such determination. The WAPCOS Limited Representative shall have the authority to issue instructions to the Contractor for every Provisional Sum Works for which the Contractor shall be entitled to a part of the Provisional Sum as determined by the WAPCOS Limited Representative.

The Contractor shall produce to the WAPCOS Limited Representative all quotations, vouchers, invoices, accounts or receipts in connection with the expenditure in respect of the Provisional Sum Works, except where the Provisional Sum Works is valued in accordance with the item wise rates quoted by the Contractor in its bid submitted to the Employer.

In respect of every Provisional Sum the WAPCOS Limited Representative shall have authority to issue instructions for the execution of work or for the supply of goods, materials, Plant Sums or services by the Contractor, in which case the Contractor shall be entitled to an amount equal to the value thereof determined in accordance with Clause 48(3).

#### **4. Billing and Payment**

The Associate/Sub – Consultant/Sub-Contractor acknowledges that under the present Contract/Agreement/Work Order/Arrangement, WAPCOS is only working as intermediary between ESIS GOA being Principal Employer/Client and Associate/Sub-consultant/Sub-Contractor. Thus the Associate/Sub-consultant/Sub-Contractor unconditionally acknowledges that the payments under the present contract/Agreement/Work

Order/Arrangement shall be made proportionately by WAPCOS only on back to back basis i.e. after 21 days subject to receipt of payment from ESIS GOA being Principal Employer/Client. The Associate/Sub-consultant/Sub-Contractor also unconditionally agree that in the event the payment or part thereof, under the present Contract/Agreement/Work Order/Arrangement is not received from ESIS GOA(Principal Employer/Client), then WAPCOS &/or any of its Employee/Officer shall not be responsible to pay any amount to Associate/Sub-consultant/Sub-Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

All the tax applicable in respect of this contract shall be payable by the Contractor and WAPCOS will not entertain any claim whatsoever in respect of the same. All billing by the Contractor should be in the name of “WAPCOS Limited, Upper Ground Floor, 59A Milrock Riverview, Ribandar, Panjim – Goa 403 006 30AAACW0764A1Z2.”

In this type of billing, GST will be applicable as per the GST slabs. The GST charged shall be reimbursed by WAPCOS Limited on submission of following documents (proof of GST paid and filing): 1) GSTR-1 2) GSTR-3 3) GST Payment Challan.

Running Account (RA) bills will be paid when the approximate value of work done is 1/3<sup>rd</sup> of the total contract amount. Each RA bill should be enclosed with certified measurement sheets, certified by Engineer in Charge after verification of the requisite quality test reports, if any, as per the relevant standards. The minimum interval between two such RA bills shall be 15 days. WAPCOS shall make the payment of bills after receipt of the payment from ESIS GOA.

This clause shall prevail on all the other clauses mentioned in this respect in the contract.

#### **CLAUSE 49: SITE OFFICES AND FACILITIES**

The cost of providing the work/facilities stated in the sub-clauses of this clause are to be borne by the Contractor and shall be deemed to be included in the rates quoted by the Contractor.

49.1 The contractor shall provide fully equipped office for Engineer- in-charge & site engineers/client along with facility of 24 hours electric with Power Backup/Inverter, drinking water supply, sanitary, internet facilities, one inspection vehicle, office furniture – tables, chairs, almirah for storage of documents etc., desktop computers/laptop of latest version/configuration along with printers (for A4 & A3 both b/w & colored printing) with internet connection 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. An amount equal to **1%** of the gross amount of running account bills and final bill will be deducted, if above facilities are not provided at site.

The Contractor shall dismantle and remove from site all such temporary structures on completion of Contract or whenever required by the Employer.

The contractor shall also make sufficient arrangement for Photography/ Videography preferably by maintaining a camera/video camera at site so that video and photographs can be taken of a specific activity at any point of time. The contractor shall also provide software like MS Project/Primavera etc. for the purpose of preparing progress report etc.

49.2 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.

- 49.3 The Contractor shall maintain daily weather record. Daily maximum and minimum temperature and corresponding, humidity shall be recorded and charted. Rainy days shall be recorded when the rain lasting more than one hour hampers the work. Any other inclemency in weather shall be recorded. The records shall be regularly shown to the Engineer-in-Charge and his signature obtained.
- 49.4 The Contractor shall arrange at his own cost to maintain a progress record of the works by taking (5"x 7")/8'X10" size colour photographs minimum 6 Nos. or more per month as directed by the Engineer-in-Charge during the construction stages and after completion and shall supply one set to the Engineer-in-Charge at no extra cost. These photographs shall also be submitted as part of the Contractors R.A. Bills.
- 49.5 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.
- 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

- 49.6 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 machine-numbered 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.

**Clause 50: Data, Services and Facilities to be provided by the Employer**

Attention is drawn to the following which are not provided by the Employer and are to be arranged by the Contractor at his own cost.

- The Employer will not provide office accommodation. The Contractor shall make his own office accommodation arrangements for their office staff for each of the field supervision teams including furniture, equipment, operation and maintenance.
- The Employer will not provide project vehicles to the Contractor. The Contractor shall make his own arrangements in respect of vehicles. The Contractor shall ensure that vehicles for the team are of good makes and are of excellent working condition.
- The Contractor shall be responsible for making his own arrangements for survey equipment.
- The Contractor shall be responsible for making his own arrangements for communications.

**Clause-51: a) Jurisdiction**

Any dispute connected with this contract shall fall within the jurisdiction of Courts at Delhi.

c) Order of Precedence of Documents

In case of difference, contradiction, discrepancy, with regard to conditions of contract, specifications, Drawings, Bill of Quantities etc. forming part of the contract, the following shall prevail in order of precedence.

- WAPCOS and ESIS GOA Agreement and terms and conditions lay over by ESIS GOA time to time. It is attached as Annexure.
- Letter of Award, along with statement of agreed variation and its enclosures, if any.
- Special Condition of Contract
- Scope of Work
- Description of Bill of Quantity/Schedule of Quantities
- Technical Specification (General, Additional and Technical Specification) as given in Tender Documents
- General Condition of Contract
- Drawings, if any
- CPWD/MORTH specification (as specified in Technical Specification in Tender) update with correction slips issued up to last date of receipt of tenders.
- Relevant B.I.S codes

**Clause-52 MAKE IN INDIA**

**Public Procurement (Preference to Make in India)**

The bidder must comply with Order Nos. P-45021/112/2020-PP(BE-II)(E-43780) dated 24.08.2020, 28.08.2020, and 31.08.2020 and also Make in India Order No. P-45021/2/2017-PP (BE-II) dated 16th September 2020 of Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India and any amendments thereon. The details available on ministry website.

Self-certification that the item offered meets the minimum local content of 50% giving details of the location(s) at which the local value addition is made in case the bidder wishes to avail the benefits under the make in India policy, if applicable.

In cases of procurement for a value in excess of ₹10crores, the local supplier 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 account or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content to avail the benefits under the make in India policy, if applicable.

Government has issued Public Procurement (Preference to Make in India) [PPP-MII] Order 2017 vide the Department for Promotion of Industry and Internal Trade (DPIIT) Order No.P45021/2/2017-B.E.-II dated 15.06.2017 and subsequent revisions vide Order No.45021/2/2017PP(BE-II) dated 28.05.2018, 29.05.2019, 04.06.2020 and 16.09.2020 to encourage 'Make in India' and to promote manufacturing and production of goods, services and works in India with a view to enhancing income and employment. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017. The salient features of the aforesaid Order are as under:

The Order is applicable for procurement by Ministry / Department / attached / subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

In procurement of all goods, services or works in respect of which the Nodal Ministry/Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

The margin of purchase preference shall be 20%. 'margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference. Ministry of Electronics and Information Technology is the Nodal Ministry for implementation of the Electronic Product Notifications issued in furtherance of PPPMII Order 2017.

Classes of Local Suppliers based on local content as per the revised PPP-MII Order dated 04.06.2020 issued by the Department for Promotion of Industry and Internal Trade (DPIIT) are as under:

- Class-I Local supplier - a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%.
- Class-II Local supplier - a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%.
- Non-Local supplier - a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to 20%.
- Only 'Class-I local supplier' and 'Class-II local supplier' shall be eligible to bid in procurement of all goods, services or works, and with estimated value of purchases less than Rs. 200 crore.

#### **CLAUSE 53: Provision as per Rule 144(xi) of GFR**

F.N0.6/18/2019-PPD Ministry of Finance Department of Expenditure Public Procurement Division 161, North Block, New Delhi 23rd July, 2020 Office Memorandum Subject: Insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017 Rule 144 of the General Financial Rules 2017 entitled 'Fundamental principles of public buying', has been amended by inserting sub-rule (xi) as under:

**Notwithstanding anything contained in these Rules, Department of Expenditure may, by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.**

The order available on the Ministry of Finance Department of Expenditure Public Procurement Division website.

SECTION– V

ADDITIONAL CONDITIONS

1. The Contractor shall be responsible for consequential effects arising out during the inspection done by the Chief Technical Examiner Cell, Central Vigilance Commission or by the Building Works Committee or third party authorized by WAPCOS or any statutory 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. Rectification of defective works or replacement of sub-standard materials or articles, as pointed out by the Chief Technical Cell, Central Vigilance Commission, Building Works Committee or authorized representative of WAPCOS or third party authorized by WAPCOS or any statutory committee, will be carried out or replaced by the Contractor at his own risk and cost. WAPCOS will not pay any extra amount for such rectification or replacement.
2. **Handing Over of the Project:** Contractor will hand over the project to Client after successful completion of each component of the project in all respect and complete satisfaction of Engineer-In-charge. The partial handing over of building components shall not be considered. Contractor shall also provide necessary Completion Certificate/ NOC from all local Government/ Statuary Authorities if required before handing over the project to the client. **The defect liability period will be one (01) years or the period mentioned elsewhere in the contract whichever is higher after such handing over.** The agency has to submit warranty certificate issued by the manufacturer for each item as specified.
3. The Contractor shall be solely responsible to follow the general clauses of the contract including labour regulations, registration of contractor, obtaining labour license from labour department, safety precautions, etc. and all other statutory provisions related to labor/works as per the prevailing General Clauses of Contract amended from time to time. The Contractor shall stick to the schedule of all activities and carry out it with mutually agreed time frame.
4. Rates and amount or Percentage Quoted by contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation shall be applicable on this contract. Rate/percentage quoted by the contractor should be exclusive of GST.
5. Other agencies doing works related to this project will also simultaneously execute the work and the contractor shall provide necessary facilities for the same. Nothing extra over the agreement rates shall be paid for the same.
6. Some restrictions may be imposed by the security staff etc. on the working and for movement for labour materials etc. The contractor shall be bound to follow all such restrictions / instructions and nothing extra shall be payable on this account.
7. The project work will be carried out in the manner complying in all respects with the requirements of relevant bye laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer in charge and nothing extra will be paid on this account. 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.

8. The contractor shall give a performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
9. Samples of various materials required for testing shall be provided free of charges by the contractor. Testing charges, if any, unless otherwise provided shall be borne by the Contractor. All other expenditure required to be incurred for taking the samples, conveyance, packing etc. shall be borne by the contractor himself.
10. The work shall be carried out in accordance with drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work the contractor shall correlate all the relevant drawings, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available there from is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim whatsoever shall be entertained on this account.
11. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by WAPCOS.
12. In the case of items of which abbreviated nomenclature is not available in the above cited publication and also in case of extra and substituted items of works for which abbreviated nomenclature is not provided in the agreement, the full nomenclature of items shall be reproduced in the measurements books and bill forms for running account bill. The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bill.
13. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer in charge. Nothing extra shall be paid on this account.
14. No payment will be made to the contractor for damage caused by rains, or other natural calamities during the execution of the works and no such claim on this account will be entertained.
15. Various factory made materials shall be procured from reputed and approved manufacturers or their authorized dealers. List of such approved manufacturers is available as per section IX (List of approved makes). For the items / materials not appearing in the list the decision of Engineer in charge shall be final and binding.
16. 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.

17. The contractor shall invariably prepare the samples of items as per direction of Engineer-in-charge. The contractor shall proceed with further finishing items only after getting the samples of these items approved in writing from Engineer-in-charge. No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the contractor on this account.
18. The contractor shall take instruction from the Engineer in charge for stacking of materials at any place. No material shall be stacked on areas where other buildings, roads, services or compound walls are to be constructed.
19. If as per municipal rules, the huts for labour are not be created at the site of work by the contractors, the contractor are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.
20. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the results or such tests and consequences thereon shall be binding on the contractor.
21. The material shall conform to the quality and make as per attached list in Technical Specifications. However, for the items not appearing in the list preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of sample brought by the Contractor shall be judged by the standard laid down in the relevant ISI specification/CPWD specification. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but stand banned by CPWD will not be used. Notwithstanding the case of materials of "Preferred Make" as given in Annexure, provisions of Clause 10A of the General Conditions of Contract for Central PWD works shall be applicable on the materials of "**Preferred Make**" also.
22. It must be ensured 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.
23. The final approval of the brand to be used shall be as per the direction of Engineer-in-Charge. The brand used shall be one of the brands in case specified in the list of preferred make / materials. The decision of the engineer in charge about the make is final and binding on the contractor.
24. In case of non-availability of material of the brands specified in the list of approved materials an equivalent brand may be used after getting written approval of WAPCOS giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

25. 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 Engineer-In-Charge, 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 Engineer-In-Charge 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 Engineer-In-Charge 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 Engineer-In-Charge should countersign the certificate recorded by the Authorized Representative.
26. 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.
27. Once the Project is completed and the contractor shall be responsible to attend defect pointed out by WAPCOS / ESIS GOA and then hand over the Project to the ESIS GOA.
28. Contractor should hand over the warranty of the specialized items in the name of ESIS GOA.
29. The contractor is required to deploy resources as per availability of site. However, no claim will be entertained for idle labour, idle machinery, idle technical/no-technical staff, idle T&P etc.
30. No claim whatsoever for idle labour, additional establishments, costs of hire and labour charges for tools and plants, scaffolding etc, would be entertained under any circumstances
31. All running account bills preferred by the contractor for advance payments shall be processed only if Engineer-in-charge is satisfied that upto date investments (excluding security deposit & performance guarantee, which are not considered as investments) made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of up-to-date payments received vis-a-vis upto date investments made on the work to enable engineer-in-charge to check to his satisfaction that the payments made by engineer-in-charge are properly utilised only on the work and nowhere else.
32. Requirement of Technical Staff as per Clause 36:

S. No.	Requirement of Technical Staff		Minimum Experience (Yrs)	Designation of Technical Staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling
	Minimum Qualification	Numbers			
1.	Graduate in Civil Engineering	1	10	Project Manager	Rs. 60,000/- per month

2	Diploma/ Degree (Civil)	2	05	Site Engineer (Civil)	Rs. 35,000/- per month
2	Diploma/ Degree (Mechanical/ electrical)	1	05	Site Engineer (MEP)	Rs. 30,000/- per month

**33. Milestones for Carrying out the work**

Contractor shall submit the detailed work schedule so as to complete the works considering all the field conditions in accordance with the requirement of the Engineer-in-charge. Contractor should also strictly adhere to such schedule mutually accepted to complete the total work within the time period mentioned in the contract.

**34. Deviation or Extra Item Limit as per Clause 12:**

**The following clauses shall prevail if not mentioned elsewhere in the contract:**

- This tender is based upon the estimations on the basis of site conditions (tentative) enclosed with technical

specifications and BOQ. WAPCOS Limited reserves the right to vary any individual item to any extent either positive or negative within the scope of work as defined as per the requirement of ESIS GOA/WAPCOS Limited. The decision as to items are within the scope of work shall be of WAPCOS Limited which is final & binding. Therefore, in case of variation in quantity as given in BOQ either positive or negative no rate revision is applicable. In case of New Rate or Price of the Substituted/Extra/deduction items shall be derived from any relevant rates or prices in the Contract. New rate or price of the substituted/Extra/deduction items shall be derived from the Delhi Schedule of Rates -2021/2023/2025. In case the rates are not available in DSR, the same shall be derived from the competitive market quotes, obtained by WAPCOS Limited/WAPCOS Limited representative. The contractor's profit and overheads together shall be taken as 15% only.

- Contractor shall execute any additional quantities of work arising due to deviations from the estimated quantities at the rates quoted in the BOQ, subject to a maximum deviation limit of 25% for each item. For items under the earthwork sub-head of DSR or related items deviations is allowed up to 100% shall be permitted at BOQ rates.
- For quantities exceeding the permissible deviation limit of 25% (or 100% in the case of earthwork items), payment shall be made at prevailing market rates, duly analyzed and approved.
- Execution of any such deviation in quantities shall be carried out only after obtaining prior written approval from WAPCOS/ESIS Goa.
- Contractor shall submit the detailed work schedule so as to complete the works considering all the field conditions in accordance with the requirement of the engineer-in-charge. Contractor should also strictly adhere to such schedule mutually accepted to complete the total work within the time period mentioned in the contract.

**35. The firm/contractor shall furnish a list of the workers deployed along with their full names,**

father's/husband's name, date of birth, full residential addresses (present & permanent), contact tel. No. etc. The firm/contractor shall be responsible to get the character and antecedents of the persons verified by the Police before deploying them in ESIS GOA. The authenticated copies of Police verification certificate/documents of the persons, who are to be deployed in ESIS GOA, shall be submitted by the firm to WAPCOS. WAPCOS/ESIS GOA reserve the right to conduct the test, as may be deemed fit to adjudge the suitability of the persons provided by the firm/contractor. WAPCOS/ESIS GOA also reserves the right to get the person's character and antecedents verified by the Police, if deemed necessary.

36. The firm will also ensure that the persons deployed in ESIS GOA are medically fit and will keep record of their medical fitness. The firm shall withdraw such persons, who are not found suitable by ESIS GOA/WAPCOS for any reasons, immediately on receipt of such request from WAPCOS/ESIS GOA. The copies of medical fitness certificate of the persons who are to be deployed in ESIS GOA, shall be submitted by the successful bidder to WAPCOS/ESIS GOA.
37. There shall be no representation of any kind, implied or otherwise, of any automatic absorption, regularization, continued engagement or concession or preference in employment security for the persons engaged by the service provider for any engagement. service or employment in any capacity, in any office or establishment of the Govt. A copy of each of the agreement entered into by the firm with the persons, deployed in ESIS GOA are required to be submitted to WAPCOS/ESIS GOA within a fortnight of deployment.
38. The contract does not amount to employment with the Government or confer any right on the contractor/firm or the workers engaged by the firm/contractor, nor any representation by the Government as to the possibility or preference in. employment at any time in future in respect of security and other personnel of the contractor/firm in any office/ establishment of the Government.
39. The firm/contractor shall appoint a coordinator, who would be responsible for immediate interaction with WAPCOS/ESIS GOA and so that optimal services are available without disruption.
40. The worker engaged will observe discipline and decorum and shall not-misbehave with any WAPCOS/ESIS GOA officer.
41. If at any point of time, any person absent himself/herself, a substitute shall be provided immediately.
42. In case, any person is absent on a particular day and substitute is not provided, a daily rate/pro rate shall be deducted from the bill for the month. In case the firm is asked to provide a substitute and fails in doing so within 3 (three) days, then a penalty equal to 10% of the daily wages of the worker will be imposed on the firm, besides deduction of daily wages.
43. The firm/contractor shall be directly responsible for settlement of any dispute or grievance of the 'Worker' relating to his/her deployment in ESIS GOA and any other matters that may arise in this regard and WAPCOS/ESIS GOA, in no way, be responsible for settlement of such issues/dispute.
44. Any liability regarding payments of wages to the 'workers' arising due to non compliance with any provisions of the Labour Laws or due to any human loss/injury during the course of work will be the sole and personal responsibility of the firm/contractor. The successful firm/contractor shall submit, a notarized affidavit on a stamp paper of appropriate value to the effect that the firm undertake to pay Minimum Rates of wages to the persons engaged as per applicable orders of CLC, GOVERNMENT OF INDIA and to enhance the rates, as and when it is revised as well as all the statutory dues w.r.t ESI, EPF etc. to ESIS GOA. The contractor will submit the copies of the EPF statement/pass Book, ESI Card and Service Tax Challans long with monthly bill, without which the payment to the contracting

- firm will not be released.
45. The successful bidder will submit an undertaking in form of duly executed affidavit to deposit EPF contribution of the Employer and Employee in the EPF Account of the workers every month.
  46. The successful bidder will also submit an undertaking in form of duly executed affidavit to the effect that if the contractor does not provide copies of depositing Employer and Employees share in the EPF Account of the employee, he will not be entitled for these payments.
  47. The successful bidders will also submit an undertaking in the form of duly executed affidavit to comply with the instructions relating to payment of EPF in respect of those employees who are not in excluded category as per instruction issued by the Government on the subject.
  48. The employer's share of EPF will not be paid to the contractor for those persons, who are in the excluded category of EPF contribution as per latest guidelines issued by Ministry of Labour & Employment in this regard. The employer's share of EPF will be paid to the Contractor on production of documentary evidence of depositing the share in the individual employee's EPF account opened for the employee in his/her name.
  49. The firm/contractor shall undertake to provide the services for the entire duration regularly failing which the Performance Security Deposits and such other amount that may be due from WAPCOS/ESIS GOA to the firm shall stand forfeited.
  50. If at any point of time, the services being provided by the firm/contractor are found to be unsatisfactory in any manner, the WAPCOS/ESIS GOA will have full authority to discontinue the services of the firm/contractor by giving notice of 15 days. The decision of WAPCOS in this regard shall be final and binding on the firm/contractor.
  51. The working hours of the workers on the basis of 6 days working in a week. The workers shall have to sign the attendance both at the time of arrival and departure.
  52. In emergent situations the services of the persons may be required on Sundays/Holidays also.
  53. If, any workers arrives late or leaves early, a deduction of the daily rate shall be made on half day basis.
  54. If, at any point of time, the services of any person provided by the firm/contractor are found to be unsatisfactory or not of the expected level in any manner, the firm/contractor shall change the worker immediately.
  55. The workers shall not be entitled for any financial benefit that are admissible to regular employees of WAPCOS/ESIS GOA. However, the firm/contractor is required to pay wages to the workers engaged strictly as per the Minimum Wages Act modified from time to time including EPF, ESI and other social security schemes of the Government of CLC, Government of India and Ministry of Labour & Employment. The wages to the workers would be dynamic. The weekly rest etc. should also be allowed to workers as per statutory provisions. This is required to be quoted by all bidders at the time of submitting bids, which would be increased as and when increased by the Government authorities. All the statutory requirements such as obtaining valid Labour Licence on the basis of contract letter and compliance of all the provisions of social security legislations in general and provisions of the Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (R&A) Rules 1971 in particular are required to be complied with by the contractor. The firm/contractor should quote their Service Charge for providing services of workers for WAPCOS/ESIS GOA over and above the statutory payments to be made to each worker. so deployed. Except the Administrative Service Charges, quoted by the service provider, no other amount is to be retained by the service provider out of the minimum wages, EPF, ESI etc. as mandated by the statutory provisions on the subject. The proof of depositing the

- service tax with the appropriate authorities have to be submitted to WAPCOS periodically.
56. The administrative Service Charges per worker Quoted by the firm in the financial bid shall be commensurate with the administrative and supervisory efforts required for executing the contract.
  57. The rates of wages and the consequential revision in the statutory contribution on worker's wages will be revised by CLC from the date of statutory revision in minimum wages of the workers and in case of revision in the rate of contribution on worker's wages (i.e EPF,ESI etc.) by the CLC Government/Central Government whatsoever may be the case. However, there will be no increase in the Administrative Service Charges quoted by the firm/contractor.
  58. The firm should be registered with ESI, PF, Service Tax, Work Contract Tax, Labour Licence& PAN (GST) with the concerned authorities.
  59. The contractor shall comply with all relevant Laws and the Rules made there under viz. Income Tax, ESI Act, PF Act, Factories Act, ID Act and Contract Labour (Regulation & Abolition) Act, Private Security Agencies (Regulation) Act, 2005 and Private Security Agencies Central Model Rules, 2006. Payment shall be conditional on fulfillment of the provisions of these Acts and the rules framed there under.
  60. The payment of wages to the workers have to be made by the contractor in accordance with the provision of Section 21 of the Contract Labour (Regulation & Abolition) Act, 1970.
  61. The firm/contractor will make payment of wages to the workers provided by 7th of every month.
  62. In case of failure to make payment of wages to the workers within the prescribed period or making short payment by the firm/contractor, the Performance Security Deposit amount deposited by the firm/contractor with WAPCOS Limited will be forfeited. The firm will also be blacklisted.
  63. Vehicle for site visit and office set up at site for WAPCOS officials shall be provided by the contractor at his own cost.
  64. The Firm/ contractor shall be responsible for all commission and omissions on the part of manpower engaged for the purpose. WAPCOS Limited shall not be held responsible in any manner whatsoever, in matter of injury/death/health etc. of the contractor's employee performing duties under this contract.
  65. If it is found that the information/certificates furnished by the participating firm is incorrect/wrong or bogus, the firm shall be blacklisted, its bids will be ignored and EMD will be forfeited.
  66. WAPCOS Limited has reserve the right to execute more items or quantities or manpower as per the ESIS GOA or site requirement.
  67. WAPCOS Limited reserve the right to verify the experience certificate by approaching another client as experience certificate submitted by the contractor.

**For & on behalf of Tenderer**

**Signature of the authorized representative :**  
**Name of the agency :**  
**Name and designation :**  
**Contact Details a) Communication address:**  
  
**b) E-mail id :**  
**c) Contact Nos. :**

**ANNEXURES**  
**SECTION- VI**

**ANNEXURE –I**  
**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WORKS**

The agreement made this \_\_\_\_\_ day of \_\_\_\_\_ two thousand and \_\_\_\_\_ between \_\_\_\_\_ S/o \_\_\_\_\_ (hereinafter called the GUARANTOR of the one part) and the WAPCOS LIMITED (hereinafter called the WAPCOS of the other part).

WHEREAS THIS agreement is supplementary to a contract. (Herein after called the Contract) dated \_\_\_\_\_ and made between the GUARANTOR OF THE ONE PART AND the WAPCOS of the other part, whereby the contractor interlay, under look to render the work in the said contract recited structurally stable workmanship and use of sound materials.

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, finishing, manufacturing defects of materials and leakages etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, after the expiry of maintenance period prescribed in the contract for the minimum life as per contract, to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-charge 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 Engineer in charge calling upon him to rectify the defects, failing which the work shall be got done by the WAPCOS by some other contractor at the guarantor's cost and risk. The decision of the Engineer in charge as to the cost payable by the Guarantor shall be final and binding.

That if 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 Engineer-in-charge will be final and binding on the parties.

IN WITNES WHEREOF those presents have been executed by the obligator \_\_\_\_\_ and \_\_\_\_\_ by for and on behalf of the WAPCOS LIMITED on the day, month and year first above written.

Signed sealed and delivered by OBLIGATOR in presence of:

1. \_\_\_\_\_
2. \_\_\_\_\_

SIGNED FOR AND ON BEHALF OF THE WAPCOS LIMITED BY \_\_\_\_\_

\_\_\_\_\_ in the presence of:

1. \_\_\_\_\_
2. \_\_\_\_\_

**ANNEXURE –II**  
**FORM OF PERFORMANCE SECURITY(GUARANTEE)**

**WAPCOS LIMITED**

76-C, Sector-18,  
Gurgaon, Haryana – 122 015

In consideration of \_\_\_\_\_ (Employer's name) (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 & 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 Guarantee for the faithful performance of the entire contract equivalent to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) (3 % of the said value of the Contract to the Employer).

We, \_\_\_\_\_ (name & address of bank) (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, on demand any or, all monies payable by the Contractor to the extent of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) 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. 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 up to and including \_\_\_\_\_ and shall be extended from time to time for such period as may be desired by M/S WAPCOS Limited on whose behalf this bank guarantee has been given.

Notwithstanding anything contained herein

- i) our liability under this guarantee shall not exceed Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) ;
- ii) This bank guarantee shall be valid upto \_\_\_\_\_ (**indicate a date two months after the probable date of completion**)
- 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 three months after validity of guarantee**).

iv)

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

**For & on behalf of Tenderer**

**ANNEXURE – III**  
**FORMAT FOR AFFIDAVIT**

I / We have submitted a bank guarantee for the work (Name of work) Agreement No. \_\_\_\_\_ Dated \_\_\_\_\_ from \_\_\_\_\_ (Name of the Bank with full address) to the WAPCOS Limited, Gurgaon Haryana with a view to seek exemption from payment of performance guarantee in cash. This Bank guarantee expires on \_\_\_\_\_ I / We undertake to keep the validity of the bank guarantee intact by getting it extended from time to time at my / our own initiative up to a period of \_\_\_\_\_ months after the recorded date of completion of the work or as directed by the WAPCOS.

I / We also indemnify the WAPCOS against any losses arising out of non-encasement of the bank guarantee if any.

**(Deponent)**  
**Signature of Contractor**

**Note:**

**The affidavit is to be given by the Executants before a first class Magistrate.**

**ANNEXURE –IV**  
**AGREEMENT PROFORMA**  
**(To be furnished on non-judicial Rs.200/- stamp paper)**

To be executed on non-judicial stamp worth Rs.200/- and continuation sheets on ledger papers and two copies on ordinary paper to be submitted neatly type-written sheets on one side of the paper in single line spacing.

**AGREEMENT**

THIS AGREEMENT IS MADE on this ..... day of ..... 2026 BETWEEN WAPCOS Limited, A Government of India Undertaking, having its office at 76-C, Sector-18, Gurgaon, Haryana – 122 015 represented by its General Manager, .....S/o....., aged ..... years residing at .....(hereinafter referred to as the ‘WAPCOS’ or ‘Client’ which expression shall, unless repugnant to the context or meaning thereof, includes its successors and assigns) of one part and M/s....., a company incorporated under the Indian Companies Act, 1956, having Its registered office at ..... represented by ..... (Designation), aged .....years, S/o..... residing at ..... (Hereinafter referred to as ‘Agency’ which expression shall, unless repugnant to the context or meaning thereof, includes its successors, administrators, liquidators and assigns or legal representatives) of the other part.

WHEREAS the Client invited NIT for “Name” vide Tender IDand the Agency submitted a bid for the same giving rates/amounts accepting the terms and conditions of the NIT document.

AND WHEREAS the said bid submitted by the Contractor has been accepted and the Client has awarded the work of “**Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)**” vide Work orderNo.....Dated.....and the Contractor submitted a signed copy of the work order as a token of acceptance of the same, giving rates/amounts accepting the terms and conditions as stipulated in the work order.

NOW THIS AGREEMENT WITNESSETH and the parties hereby agree as follows:

1. The bid submitted by the Agency for the scope of services/work specified in the NIT at the rates/amounts specified in consideration of all the terms and conditions in the NIT is accepted.
2. It shall be valid for a period of three years from the date of signing unless revoked earlier. Further extensions will be considered as per the provisions of NIT.
3. The Agency agreed to abide by and fulfil all the terms and provisions of the said conditions of contract in default thereof forfeit and pay to WAPCOS the sum of money mentioned in the said conditions.
4. It is mutually agreed that the offer in its entirety shall form part of this agreement.

The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

1. Notice Inviting Tender (NIT)
2. Contract Data
3. Bidder's Bid
4. Work Order
5. Bill of Quantities
6. Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written at Goa/Gurgaon

**Signature of the Employer**  
(with the seal of company and address)

**Signature of the Bidder**  
(with the seal of company and address)

In the presence of:

Witness

1. Name and Address

2. Name and Address

**ANNEXURE – V**

To,

WAPCOS Limited,  
76-C, Sector 18,  
Institutional Area  
Gurgaon-122015, Haryana

**Sub: Integrity Pact for ----- (Name of Work / Project)**

Dear Sir,

I/We acknowledge that WAPCOS is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by WAPCOS. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, WAPCOS shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

I/ We acknowledge that “ In case of a joint venture, all the partners of the joint ventures should sign the integrity pact. In case of sub-contracting, the principle contractor shall be solely responsible for the adherence to the provisions of the IP by the sub-contractor(s).

Yours faithfully,

Date:

Signature, name and  
designation of the  
Authorized signatory)

Place:

**Name and seal of Bidder**

**FORMAT FOR INTEGRITY PACT AGREEMENT**  
**(On Rs.100 stamp paper)**

This Integrity Agreement is made at ..... on this..... day of ..... 20.....

WAPCOS Ltd. Here in after referred to as "The Principal" (which expression, unless repugnant to the context there of, shall mean and include its legal representatives, heirs and assigns)

**AND**

.....hereinafter referred to as "The Bidder/Contractor" (which expression, unless repugnant to the context there of, shall mean and include its legal representatives, heirs and assigns)

**Preamble**

The principal intends to award, under laid down organizational procedures, contract(s) for (Name of the contract) (here in after referred to as the 'Project'). The Principal necessarily requires full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s)and/or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the Integrity Pact by all parties concerned, for all works covered in the Project.

To meet the purpose aforesaid both the parties have agreed to comply this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

**Section 1 - Commitments of the Principal**

**Obligations on Principal**

The Employer is committed to follow the principle of Transparency, Equity and Competitiveness in Public Procurement.

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

- a) No employee of the Principal, personally or through family members or through any other channel, will in connection with the tender for or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit, which the person is not legally entitled to.

- b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- c) The Principal will exclude from the process all known prejudiced persons. The Principal shall obtain bids from only those parties who have been short-listed or pre-qualified or through a process of open advertisement/web publishing or any combination thereof.

(2) If the Principal obtains information on the conduct of any of its employees, Contractor(s) and/or Bidder(s), which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer or the principal will take remedial actions as per department/conduct rules and subject to its discretion, can additionally initiate disciplinary actions.

(3) The Principal will enter into agreements with identical conditions with all Contractor(s)/Bidder(s) for the different Work Packages in the aforesaid Project.

(4) The Principal will disqualify from the tender process all Contractor(s)/Bidder(s) with estimated cost of work put to tender of Rs 5.0 crores and above, who do not sign this act or violate its provisions.

## **Section 2 - Commitments of the Bidder(s)/Contractor(s)**

### **Obligations on Bidder/ Contractor**

To accept and comply with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by Employer. Duration of the Integrity Agreement shall be in the line with section 8 of the Integrity Agreement.

Bidder/Contractor acknowledge that in the event of breach of the Integrity Agreement Employer shall have unqualified, absolute and unfettered right to take action under section 3.

(1) It is required that each Bidder/Contractor (including their respective officers, employees and sub-contractors) adhere to the highest ethical standards, and report to the Government/Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

(2) The Bidder(s)/Contractor(s) commit(s) itself/themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage, of any kind whatsoever, during the tender process or during the execution of the contract.
- (b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, for purpose of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. It shall be incumbent on the Indian agent and the foreign principal to Adhere to the relevant guidelines of Government of India, issued from Time to time regarding availing services of Indian Agents for foreign Suppliers.

Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian Agent/representative have to be in Indian Rupees only.

- (e) The Bidder(s)/Contractor(s) will, when submitting his bid, disclose any and all payments he has made, is committed to or intends to make to

agents, brokers or anyother intermediaries in connection with the award of the contract.

(f) The Bidder(s)/Contractor(s) to disclose any transgression with any other company that may impinge on the anti-corruption principle.

(3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining un just advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.

(5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or in indirectly, where potential or actual injury may be fall upon a person, his/her reputation or property to influence their participation in the tendering process).

(6) The Bidder(s)/Contractor(s) signing IP shall not approach the Courts while representing the matters to IEM and he/she will await their decision in the matter.

(7) The Bidder(s)/Contractor(s), in case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor.

### **Section3: Disqualification from tender process and/or exclusion from future contracts.**

Without prejudice to any rights that may be available to the Employer under law or the Contractor its established policies and laid down procedures, the Employer shall have the following rights in case of breach of this Integrity Pact by the

Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Employer absolute right:

(1) If the Bidder(s)/Contractor(s), before awarding the Project or during execution has committed a transgression by violating Section 2 above or in any other form so as to put his eliability or credibility in question, the Principal, at its sole discretion, after giving proper pportunity to the bidder is entitled to disqualify the Bidder(s) /Contractor(s) from the tender process or terminate the contract, if already awarded or exclude the Bidder/Contractor from future contract award processes, for that reason, without prejudice to any other legal rights or remedies available to the Principal under the relevant clauses of GCC/SCC of the tender/contract. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal. Such exclusion may be forever or for a limited period as decided by the Principal.

(2) If the Contractor(s)/Bidder(s) has committed a transgression through a violation of any of the terms under Section2 above or in any other form such as to put his reliability or credibility into question, the Principal will also been titled to exclude such Contractor(s)/Bidder(s) from

future tenders/contract award processes. The imposition and duration of the exclusion will be determined by the Principal, keeping in view the severity of the transgression. These verity will be determined by the circumstances of the case, in particular, the number of transgressions and/or the amount of the damage.

(3) If it is observed after payment of final bill but before the expiry of validity of Integrity Pact that the contract or has committed a transgression, through a violation of any of the terms under Section 2 above or any other term(s) of this Pact, during the execution of contract, the Principal will be entitled to exclude the contractor from further tender/contract award processes.

(4) The exclusion will be imposed for a minimum period of six (6) months and a maximum period of three (3) years.

(5) If the Contractor(s)/Bidder(s) can prove that he has restored/recouped the damage to the Principal caused by him and has installed a suitable corruption prevention system, the Principal may, at its sole discretion, revoke or reduce the exclusion period before the expiry of the period of such exclusion.

#### **Section 4: Compensation for Damages**

(1) If the Principal has disqualified the Bidder(s)/Contractor(s) from the tender process prior to the awarding of the Project according to Section 3, the Earnest Money Deposit (EMO)/ Bid Security furnished, if any, along with the offer, as per terms of the Invitation of Tender, shall also be forfeited. The Bidder(s)/Contractor(s) understands and agrees that this will be in addition to the disqualification and exclusion of the Contractor(s)/Bidder(s) as may be imposed by the Principal, in terms of Section 3 above.

(2) If, at any time after the awarding of the Project, the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Security Deposit/Performance Bank Guarantee furnished by the contractor, if any, as per the terms of the NIT/Contract shall be forfeited without prejudice to any other legal rights and remedies available to the Principal under the relevant clauses of General/Special Conditions of Contract.

The Contractor(s)/Bidder(s) understands and agrees that this will be in addition to the disqualification and exclusion of the Bidder(s)/Contractor(s), as may be imposed by the Principal in terms of Section 3 above.

#### **Section 5: Previous transgression**

(1) The Bidder(s)/Contractor(s) herein declares that it has committed no transgressions in the last 5 years with any other company in any country, conforming to the anti-corruption approach as detailed herein, or with the government, Central Government, or State Government, or any other Public Sector Enterprise in India, that could justify its exclusion from the tender process.

(2) If at any point of time during the tender process or after the awarding of the Contract, it is found that the Bidder(s)/Contractor(s) has made an incorrect statement on this subject, he can be disqualified from the tender process or, if the Contract is already awarded, it will be terminated for such reason and the Bidder(s)/Contractor(s) can be blacklisted in terms of Section 3 above.

(3) If the Bidder/Contractor can prove that he has rectified/recouped the damage caused by him and has installed a suitable corruption prevention system, the Employer may, at its own discretion, revoke the exclusion prematurely.

#### **Section 6: Independent External Monitor I Monitors**

(1) The Principal shall, in cases where the Project Value is in excess of Rs 5.0 crore and above, appoint competent and credible Independent External Monitor(s) with clearance from the Central Vigilance Commission. The Monitor shall independently review the cases referred to it to assess whether and to what extent the parties concerned comply with the obligations under this Integrity Pact.

(2) In case of non-compliance with the provisions of the Integrity Pact, the complaint or non-compliance is to be lodged by the aggrieved party with the Nodal Officer only, as appointed by the CMD, WAPCOS. The Nodal Officer shall refer the complaint or non-compliance received by him to the aforesaid Monitor.

(3) The Monitor will not be subject to any instructions by the representatives of the parties and will perform its functions neutrally and independently. The Monitor shall report to the Chairman-cum-Managing Director, WAPCOS.

(4) The Bidder(s)/Contractor(s) accepts that the Monitor shall have the right to access, without restriction, all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to its project documentation. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s) with confidentiality.

(5) The Principal will provide the Monitor with sufficient information about all meetings among the parties related to the project, provided such meetings could have an impact on the contractual relations between the Principal and the Contractor.

As soon as the Monitor notes, or believes to note, a violation of this Pact, he will inform the principal and request the principal to discontinue and/or take corrective action, or to take other relevant action(s). The Monitor can

In this regard submit non-binding recommendations. However, beyond this, the Monitor has no right to demand from the parties that they act in a specific manner and/or refrain from action and/or tolerate action.

(6) The Monitor will submit a written report to the CMD, WAPCOS within 4 to 6 weeks from the date of reference or intimation to it and, should the occasion arise, submit proposals for corrective actions for the violation or the breaches of the provisions of the agreement noticed by the Monitor.

(7) If the Monitor has reported to the CMD, WAPCOS, of a substantiated suspicion of an offence under the relevant IPC/PC Act, and the CMD, WAPCOS, has not, within a reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Chief Vigilance Officer, WAPCOS.

(8) The word 'Monitor' means Independent External Monitor and includes both singular and plural forms.

(9) For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matters should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.

(10) IEM should examine the process integrity, they are not expected to concern themselves with fixing responsibility of officers. Complaints alleging malafide on the part of any officer of the organization should be looked into by the CVO of the concerned organization.

(11) The role of IEM is advisory, would not be legally binding, and is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organizations

(12) Issues like warranty/guarantee etc. Should be outside the purview of IEMs.

(13) The role of the CVO of the organization shall remain unaffected by the presence of IEMs. A matter being examined by the IEMs can be separately investigated by the CVO in terms of the provisions of the CVC Act or Vigilance Manual if a complaint is received by him/her or directed to him/her by the commission

#### **Section7-Criminal charges against violating Bidder(s)/Contractor(s)/Subcontractor(s)**

If the Principal obtains knowledge of conduct of a Bidder/Contractor or any employee or a representative or an associate of a Bidder/Contractor, which constitutes a criminal offence under the IPC/PC Act, or if the Principal has substantive suspicion in this regard, the Principal will forthwith inform the same to the Chief Vigilance Officer, WAPCOS

#### **Section8- Duration of the Integrity Pact**

This Pact shall come into force when both parties have legally signed it. The Pact shall expire, in case of the Contractor(s), 3 (three) months after the last payment under the Contract is made and in case of the unsuccessful Bidder(s), 2 (two) months after the contract for the project has been awarded

If any claim is made or lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged or determined by CMD of WAPCOS

The Bidder(s)/Contractor(s), however, understand and agree that even upon the completion of the Project and/or the last payment under the Contract having been made, if any transgression/violation of the terms of this Pact comes/is brought to the notice of the Principal, it may, subject to its discretion, blacklist and/or exclude such Bidder(s)/Contractor(s) as provided for in Section 3, without prejudice to any other legal right or remedy so available to the Principal.

**Section9- Other provisions**

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the principal, i.e. New Delhi.
- (2) Changes and supplements as well as termination notices need to be made in writing.
- (3) If the Bidder/Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement shall remain valid and binding. In such a case, the parties will strive to come to an agreement in accordance to their original intentions
- (5) Wherever he or his is indicated in the above sections, the same may be read as he/she or his/her, as the case may be.
- (6) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement/Pact, any action taken by the Principal in accordance with this Integrity Agreement/Pact or interpretation thereof shall not be subject to arbitration.
- (7) I/ We acknowledge that “ In case of a joint venture, all the partners of the joint ventures should sign the integrity pact. In case of sub-contracting , the principle contractor shall be solely responsible for the adherence to the provisions of the IP by the sub-contractor(s).

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(For& On behalf of the Principal)  
(Office Seal)

(For& On behalf of Bidder/Contractor)  
(Office Seal)

Place  
Date  
Witness1:

Place  
Date  
Witness1:

(Name & Address)  
Witness2:

(Name & Address)  
Witness2:

(Name & Address)

(Name & Address)

**ANNEXURE – VI**  
**FORMAT OF RESUME OF PROPOSED PERSONNEL**

The bidder shall provide all the information requested below:

Position		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present Employer

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company, Project, Position, and Relevant Technical and Management Experience

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

{ day/month/year }

**Name of Personnel**

**Signature**

**Date**

{ day/month/year }

**Name of authorized Representative  
of the Contractor**

**Signature**

**Date**

**ANNEXURE –VII**  
**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  $\frac{1}{4}$  to 1 ( $\frac{1}{4}$  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 up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least  $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person
6. (a) Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped

back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

(b) Safety Measures for digging bore holes:-

- i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
- ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work;
- iii. Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all-round the point of drilling to avoid entry of people;
- iv. After drilling the bore well, 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 bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
- vi. After the bore well is drilled the entire site should be brought to the ground level.

7. Demolition - Before any demolition work is commenced and also during the progress of the work,

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

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

- (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
- (iii) Those engaged in welding works shall be provided with welder's protective eye shields.
- (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

(v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures 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 off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- (g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- (h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge 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.
- (l) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- (m) The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.

- (n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- (o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- (p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

(vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-

- (q) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- (r) 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.
- (s) 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 equipment's 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.

**For & on behalf of Tenderer**

ANNEXURE – VIII

**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 equipment's:-
    - 1. 6 small sterilized dressings.
    - 2. 3 medium size sterilized dressings.
    - 3. 3 large size sterilized dressings.
    - 4. 3 large sterilized burn dressings.
    - 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
    - 6. 1 (30 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
    - 7. 1 snakebite lancet.
    - 8. 1 (30 gms.) bottle of potassium permanganate crystals.
    - 9. 1 pair scissors.
    - 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 equipment's.
    - 1. 12 small sterilized dressings.
    - 2. 6 medium size sterilized dressings.
    - 3. 6 large size sterilized dressings.

4. 6 large size sterilized burn dressings.
5. 6 (15 gms.) packets sterilized cotton wool.
6. 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
7. 1 (60 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label
8. 1 roll of adhesive plaster.
9. 1 snake bite lancet.
10. 1 (30 gms.) bottle of potassium permanganate crystals.
11. 1 pair scissors.
12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.
13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
14. Ointment for burns.
15. A bottle of suitable surgical antiseptic solution.

- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

#### **4.DRINKING WATER**

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

## 5.WASHING FACILITIES

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

## 6.LATRINES AND URINALS

- (i) Latrines shall be provided in every work place on the following scale namely:-
  - a. Where female are employed, there shall be at least one latrine for every 25 females.
  - b. Where males are employed, there shall be at least one latrine for every 25 males.
  - c. 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.
- (ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iii) The inside walls shall be constructed of masonry or some suitable heat-resisting non-absorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (iv) (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.  
(b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (v) There shall be at least one urinal for male workers up to 50 and one for female workers up to fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereafter.
- (vi) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.  
(b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (viii) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately, excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- (ix) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in

respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

## **7.PROVISION OF SHELTER DURING REST**

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 meters (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 sq.m. (6 sq.ft) per head. Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

## **8.CRECHES**

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

## **9.CANTEENS**

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

- (x) The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- (xi) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square meter (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- (xii)(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.
- (xiii) Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- (xiv) (a)(1). There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment's necessary for the efficient running of the canteen.  
(2). The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.  
(b)(1). Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.  
(2). A service counter, if provided, shall have top of smooth and impervious material.  
(3). Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment's.
- (xv) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- (xvi) 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.
- (xvii) 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.
- (xviii) 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 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 notice 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.

**For & on behalf of Tenderer**

**ANNEXURE – IX**  
**FORM OF ADVANCE PAYMENT GUARANTEE**

**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 a contract valued \_\_\_\_\_ at \_\_\_\_\_ Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) for \_\_\_\_\_ (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. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) as an advance against bank guarantee to be furnished by the Contractor.

We, \_\_\_\_\_ (name & address of bank) having its Head Office at \_\_\_\_\_ (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 \_\_\_\_\_ only) 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 \_\_\_\_\_ only);
- 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 – X

**(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 GUARANTEE BONDS**

**To Be Executed by Contractor for Water Proofing after Completion of Work**

This Supplementary Agreement made this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ between (Name of Contractor firm & address) \_\_\_\_\_ (hereinafter called the CONTRACTOR / GUARANTOR of the one part) and the WAPCOS LIMITED, 5<sup>th</sup> floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called WAPCOS of the other part) for the Work <Name of Work> in respect of Contract Agreement (hereinafter called the “Original Agreement” signed between .....(Name of Contractor firm) and WAPCOS on..... dated .....), whereby the contractor interalia, under look to render the buildings and structures in the contract recited completely water and leak-proof for Toilets, Shower , Under Ground Tank, Roof, Over Head Tank, Basement and any other allied areas of building.

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 whichever 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 whichever 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 WITNES 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**

<b>For and on behalf of the Contractor</b>	<b>For and on behalf of the Principal Employer/Employer</b>
--	---

NAME \_\_\_\_\_  
Designation

NAME \_\_\_\_\_  
Designation

**in the presence of witness:**

**in the presence of Witness**

1 \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

2

\_\_\_\_\_

ANNEXURE X (a)

**FORM OF BANK GUARANTEE BOND FOR WATER PROOFING WORK**

1. In consideration of the .....(Name of Principal Employer) (hereinafter called “The Owner”) having agreed to exempt..... (Hereinafter called the said contractor(s)) from the demand, under the terms and conditions of the Agreement No..... dated.....Made between ..... and ..... For the work of..... (hereinafter called “The said Agreement”) security deposit for the due fulfillment by the said contractor(s) of the terms & conditions contained in the said Agreements for the work of Anti water proofing work on production of an irrevocable Bank Guarantee for Rs. 10 Lakhs for ten years we ..... (Indicate the name of the bank) (Hereinafter referred to as “the Bank) hereby undertake to pay to the Owner an amount not exceeding Rs. ....(Rupees .....only) on demand by the Owner
2. We..... (indicate the name of the bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from Principal Employer stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under the Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ....(Rupees .....only).
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 us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We..... (indicate the name of the Bank) further agree that the guarantee 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.

5. We..... (indicate name of the bank) further agree with Principal Employer that Principal Employer shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by Principal Employer against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of commission of the part of Principal Employer or any indulgence by Principal Employer to 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 XI

**(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.

IN WITNES 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**

<b>For and on behalf of the Contractor</b>	<b>For and on behalf of the Principal Employer/Employer</b>
--	---

NAME \_\_\_\_\_

NAME \_\_\_\_\_

Designation

**in the presence of witness:**

1 \_\_\_\_\_

2 \_\_\_\_\_

Designation

**in the presence of Witness**

1 \_\_\_\_\_

2 \_\_\_\_\_

**SECTION– VII**

**ELIGIBILITY CRITERIA AND IT's FORMS:**

**FORM A**  
**LETTER OF TRANSMITTAL**

**Deputy Chief Engineer**  
**C&C Division**  
**WAPCOS Limited**  
**76-C, Institutional Area, Sector - 18**  
**Gurugram-122015, Haryana**  
**Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

**Subject: Submission of bids for the “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”.**

Sir,

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

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to J and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. We also authorize WAPCOS Limited to approach individuals, employers, Firms and Corporation to verify our experience certificates of similar works and any / all the documents submitted herewith the bid document along with general reputation and competence.
4. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

<b>Name of work</b>	<b>Certificate from</b>

**Certificate:**

**It is certified that the information given in the enclosed technical 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.**

Enclosures:

Date of submission:

**Seal of bidder**  
**Signature(s) of Bidder(s)**

**FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF  
PROPOSAL FOR AUTHORIZED SIGNATORY  
(On Rs. 100 stamp paper)**

Know all men by these presents,  
we ..... (Name of  
the

Tenderer and address of their registered office) do hereby constitute, appoint and authorize  
Mr

/Ms .....(name and residential address of  
Power of Attorney holder) who is presently employed with us and holding the  
position

of .....

..... a sour attorney, to do in our name and on our behalf, all such acts, deeds and things  
necessary in connection with or incidental to our Bid for the Project and submission of all  
documents and providing information / responses to

, representing us in all matters before, and generally dealing with

In all matters in connection with our proposal for the said Project. We hereby agree to ratify  
all acts, deeds and things law fully done by our said attorney pursuant to this Power of  
Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall  
always be deemed to have been done by us.

**FORM B  
FINANCIAL INFORMATION**

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

<b>Years</b>	<b>Gross Annual Turnover</b>	<b>Profit/Loss (After Tax)</b>
<b>2024-2025</b>		
<b>2023-2024</b>		
<b>2022-2023</b>		
<b>2021-2022</b>		
<b>2020-2021</b>		

**Signature of Chartered Accountant  
Bidder(s). (with UDIN Number and Seal)  
(with Seal)**

**Signature of**

**FORM C**  
**SOLVENC CERTIFICATE FROM A NATIONALIZED BANK**

To

WAPCOS LIMITED  
Plot No-76 C Intuitional Area Sector-18  
Gurugram-122015

**Name of the Work: “Special Repair Works of Civil and Electro-Mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”**

This is to certify that to the best of our knowledge and information that

M/s..... having marginally noted address,  
as a Customer of our bank are/is respectable and can be treated as good for any engagement  
upt o a limit of Rs.....

(Rupees.....  
.....)

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

**(Signature) For the Bank**  
**(Email id of the bank)**

**NOTE:**

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

**FORM – C SOLVENCY CERTIFICATE/ BANKER’S CERTIFICATE  
[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK]**

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

This is certify that to the best of our knowledge and information that M/s  
..... having marginally noted  
address,.....  
..... as a Customer of our Bank Account are/ is  
respectable and can be treated as good for any engagement up to a Limit of Rs.  
..... (Rupees.....)

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

**(Signature for  
The Bank)**

**NOTE:**

1. Banker’s certificates/ Solvency Certificate should be on letter head of the Bank addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana.
2. In case of partnership firm, certificate should include name of all partners as recorded with the Bank.
3. Bank may do the minor changes in the format as per the approved format of bank without changing the gist of content.

**Form C-1: FORM OF BANKERS' CERTIFICATE FROM A COMMERCIAL BANK**

This is to certify that to the best of our knowledge and information that M/s/Sh. ....having marginally noted address, ..... as a customer of our bank are/is respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees.....)

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

(Signature) For the Bank

**NOTE:-**

1. Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
2. In case of partnership firm, certificate should include names of all partners as recorded with the bank.

**Form C-2: FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT**

It is to certify that as per the audited balance sheet and profit & loss account during the financial year ....., the Net Worth of M/s ..... (Name & Registered Address of individual/firm/company), as on ..... (the relevant date) is Rs ..... after considering all liabilities.

It is further certified that the Net Worth of the company has not eroded by more than 30% in the last three years ending on (the relevant date).

Unique Document Identification Number (UDIN) .....

Signature of Chartered Accountant .....

Name of Chartered Accountant .....

Membership No. of ICAI

Date and Seal

**FORM D**  
**DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING**  
**LAST SEVEN YEARS**

Sl. No	Name of Project & Location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of Commencement as per contract	Stipulated date of completion	Actual date of completion	Name and address/ telephone number of officer to whom reference may be made
1							
2							
3							
4							
5							
6							
7							

**(Signature of the Bidder)**

**Note: This should be accompanied by Completion certificate and work order along with bill of quantities.**

**FORM E (On letter Head)  
STRUCTURE & ORGANISATION**

S.No.	Particulars	Details Submitted by Bidder
1.	Name & address of the Bidder:	
2.	Telephone no./Mobile No./Telex no./Fax no.	
3.	Email id for communication	
4.	Legal status of the bidder (attach copies of original document defining the legal status)  (a) An Individual (b) A proprietary firm (c) A firm in partnership (d) A limited company or Corporation	
	Particulars of registration with various Government Bodies (attach attested photocopy)	
5.	Organization/Place of Registration  1. 2. 3.	Registration No.
6.	Names and titles of Directors & Officers with designation to be concerned with this work along with their contact number and Email id	
7.	Designation of individuals authorized to act for the organization	
8.	Has the bidder, or any constituent partner in case of partnership firm Limited Company/ Joint Venture, ever been convicted by the court of law? If so, give details.	

9.	Banker of Agency with full address (Attach bankers certificate of account maintenance for the last two years) Telephone number of banker	
10	PAN of the firm	
11	Statutory requirements: a) Whether the firm/company is registered with labour Department of State Government/UT Administration b) Whether the firm/company is registered under the employees State Insurance Act, 1948 c) Whether the firm/company is registered under the Employees Provident Fund and Miscellaneous Provision Act, 1952.	
12.	ESI, P.F, GST, Labour Registration No.	
13.	GST Paid last receipt	
14	Affidavit by the firms to pay minimum rates wages to the workers engaged as per applicable order Government CLC and to enhance the rates, as and when it is revised.	
15.	Undertaking by the firm to provide clearance from police authorities in respect of workers.	
16.	Any other information considered necessary but not included above.	

**Signature of Bidder(s)**

FORM F

**Format of Undertaking to be furnished on Company Letter Head with regard to  
Blacklisting/Non-Debarment by the contracting Agency**

**Name of work:**

**Ref: Tender No..... dated....**

**To**

**Deputy Chief Engineer  
C&C Division  
WAPCOS Limited  
76-C, Institutional Area, Sector - 18  
Gurugram-122015, Haryana  
Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Limited. 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.

For.....  
Authorized Signatory  
Date: -

**FORM G**

**FORMAT FOR UNDERSTANDING THE PROJECT SITE**

*(on Bidder Letter Head)*

To

**Deputy Chief Engineer  
C&C Division  
WAPCOS Limited  
76-C, Institutional Area, Sector - 18  
Gurugram-122015, Haryana  
Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

**Subject: Undertaking of the Site Visit for “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”.**

Sir,

I/we hereby certify that I/we have examined & inspected the site & its surrounding satisfactorily, where the project is to be executed as per the scope of works. I/ We are well aware about the Location of the Building and existing utilities to connect to the system, conditions prevailing at site, availability of materials, availability of land and transport facilities, weather condition at site, the extent of leads and lifts involved in execution of work etc.

I / We hereby submit our BID considering above all facts gathered during site visit and each & every aspect have been considered in the Quoted cost of the project as per BOQ

Yours faithfully,

Date: (Signature, name and designation of the Authorized signatory)

Place: **Name and seal of Bidder**

**FORM H**  
**FORMAT FOR NO DEVIATION CERTIFICATE**

[To be submitted on Bidder's Letter Head]

To,

**Deputy Chief Engineer**  
**C&C Division**  
**WAPCOS Limited**  
**76-C, Institutional Area, Sector - 18**  
**Gurugram-122015, Haryana**  
**Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

**Subject: No Deviation Certificate for “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”**

Dear Sir,

With reference to above 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.

Thanking you,

Yours faithfully,

Date: (Signature, name and designation of the Authorized signatory)

Place:

**Name and seal of Bidder**

**FORM I**  
**CONSENT LETTER FOR INTEGRITY PACT**

To,

**Deputy Chief Engineer**  
**C&C Division**  
**WAPCOS Limited**  
**76-C, Institutional Area, Sector - 18**  
**Gurugram-122015, Haryana**  
**Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

**Sub: Integrity Pact for “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”.**

Dear Sir,

I/We acknowledge that WAPCOS is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that **THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE** of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by WAPCOS. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, WAPCOS shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Date:

Place:

Yours faithfully,  
(Signature, name and  
designation of the Authorized  
signatory)

**Name and seal of Bidder**

(On 100 Rs Stamp Paper)  
FORMAT FOR INTEGRITY PACT

This Integrity Agreement is made at ..... on this .....day of ..... 20.....

**BETWEEN**

WAPCOS Limited, New Delhi (Hereinafter referred as the „Principal/Owner“, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**AND**

.....  
(Name and Address of the Individual/firm/Company) through  
..... (Hereinafter referred to as the  
(Details of duly authorized signatory) “Bidder/Contractor” and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**Preamble**

WHEREAS the Principal / Owner has floated the Tender (NIT No. ....)  
(hereinafter referred to as “Tender/Bid”) and intends to award, under laid down organizational procedure, contract for..... (Name of work) hereinafter referred to as the “Contract”.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as “Integrity Pact” or “Pact”), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

**Article 1: Commitment of the Principal/Owner**

(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

(c) The Principal/Owner shall endeavour to exclude from the process any person, whose conduct in the past has been of biased nature.

(2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

**Article 2: Commitment of the Bidder(s)/Contractor(s)**

(1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the WAPCOS all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

(2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:

(a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall

not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

(3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the WAPCOS interests.

(5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

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

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

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

(2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

(3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

#### **Article 4: Previous Transgression**

(1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

(3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely

#### **Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors**

(1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors

(2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.

(3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

#### **Article 6- Duration of the Pact**

**Defect Liability period shall be one year.** This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, WAPCOS.

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

(1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Principal/Owner, who has floated the Tender.

(2) Changes and supplements need to be made in writing. Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

(4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

**Article 8- Legal and Prior Rights**

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

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses

.....  
(For and on behalf of Principal/Owner)

.....  
(For and on behalf of Bidder/Contractor)

**WITNESSES:**

1. ....  
(signature, name and address)

2. ....  
(signature, name and address)

Place:

Dated:

**FORM-J**  
**UNDERTAKING**  
**(Rule 144(xi) in the General Financial Rules (GFRs), 2017**

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered.

Date

Place

Signature, name and designation of the Authorized signatory)  
Name and Seal of the bidder

**FORM-K**

**AFFIDAVIT**

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

On behalf of -----

Sign and Seal of firm

**[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR OF BIDDER]**

**FORM-M : FINANCIAL INFORMATION**

<b>Years</b>	<b>Gross Annual turnover</b>	<b>Profit/Loss (After Tax)</b>	<b>Net worth</b>
2020-2021			
2021-2022			
2022-2023			
2023-2024			
2024-2025			

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. :**

**Place:**

**SECTION-VIII**

**SCOPE OF WORK**

The scope of work for the work of “**Special Repair Works of Civil and Electro-Mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)**” includes the following but not limited.

The scope of work under this contract comprises comprehensive execution of civil, electrical, and electro-mechanical works at ESIS Hospital, Margao, Goa (Package-03). The contractor shall be responsible for the supply, installation, testing, commissioning (SITC), execution, and handing over of all components in complete accordance with technical specifications, approved drawings, and directions of the Engineer-in-Charge.

**1. Chiller Systems (Electrical & HVAC Works)**

The contractor shall undertake Supply Installation Testing and Commissioning (SITC) of two (02) Chiller Units of specified capacity as per BoQ, including all associated components such as control panels, piping, insulation, valves, supports, and accessories. The work includes proper integration with existing HVAC systems, testing for performance efficiency, and commissioning to achieve desired cooling parameters.

**2. Pumps, Cabling, AHUs, and HVAC Accessories**

The scope includes Supply Installation Testing and Commissioning (SITC) of pumps, electrical cabling, and repair/refurbishment of existing Air Handling Units (AHUs) as per BoQ. All associated HVAC accessories including ducts, dampers, insulation, and control systems shall be installed or repaired as required to ensure complete operational efficiency of the chiller-based HVAC system.

**3. Modular Operation Theatres (OTs)**

The contractor shall execute two modular operation theatres (OTs) as per items mentioned in BoQ. This includes supply and installation of OT equipment such as surgical lights, pendants, monitors, and control panels. The work also covers SITC of prefabricated wall and ceiling systems made of electro-galvanized steel (EGP), ensuring compliance with healthcare

standards, sterility requirements, and integrated services (HVAC, electrical, and medical gas provisions).

#### **4. Granite Works**

The contractor shall carry out granite for works for flooring, toilets counter etc in the hospital campus premises for approximately 1000 sqm area as per items mentioned in BoQ, including supply, laying, fixing, curing, grinding, and polishing. All works shall ensure proper alignment, level finishing, and durability as per approved specifications.

#### **5. Doors Installation**

The work includes supply and installation of approximately 300 numbers of flush and PVC doors, including chowkhats (frames), fittings, fixtures, and accessories as per items mentioned in BoQ. Proper alignment, finishing, and hardware installation shall be ensured for functional and aesthetic compliance.

#### **6. Waterproofing Works**

The contractor shall execute waterproofing treatment for approximately 2600 sqm area, covering roofs, Basement and toilet sections as per items mentioned in BoQ. The work includes surface preparation, application of approved waterproofing systems, testing for leakage, and providing guarantees for performance.

#### **7. Sump Tank and Basement Repairs**

The scope includes construction of a sump tank and execution of repair works in the basement area as per items mentioned in BoQ. This involves RCC works, waterproofing, structural repairs, and ensuring the stability and functionality of the basement infrastructure.

#### **8. False Ceiling Works**

The contractor shall provide and fix false ceiling across approximately 15,000/- sqm area, covering major portions of the hospital premises as per items mentioned in BoQ. The work

includes supply of materials, suspension systems, framing, panels, finishing, and integration with lighting and HVAC services.

#### **10. Miscellaneous Works**

The contractor shall execute miscellaneous works including aluminium works, tiles works for flooring and walls, horticulture improvements, GS sheet installation, truss works, Paining, Plaster, RCC and earthworks, plumbing systems, fabrication in civil and electrical wiring, installation of hot water systems, HT/LT panels, lighting fixtures, switches, and other allied works required for project completion in hospital campus premises.

#### **11. General Obligations**

The contractor shall provide all necessary manpower, materials, tools, plant & machinery, scaffolding, safety measures, and quality control systems as per items mentioned in BoQ. All works shall be carried out as per relevant IS codes, specifications, and directions of the Engineer-in-Charge. Testing, commissioning, documentation, and final handing over in operational condition are included in the scope.

#### **12. Prepration of Drawings and approval from Engineer in Charge**

The Contractor shall prepare all necessary design drawings in accordance with site requirements, in consultation with WAPCOS/ESIS Goa and as directed by the Engineer-in-Charge. The Contractor shall also obtain all requisite approvals from the competent authority, including vetting of the drawings, prior to execution of the work.

Details of Civil Works Tentative Scope includes the following

##### **A      Civil Works (Tentative Scope):**

1. Provision of 18mm thick granite toilets counter and flooring.
2. Providing and laying 300x450 or more 1st quality ceramic glazed wall tiles in toilets
3. Providing and laying aluminum composite panel.
4. Provision of second-class teak wood frame for doors.
5. Provision of 30mm thick flush door shutters for doors.
6. Providing and fixing hard drawn steel wire fabric 75x25mm mesh.

7. Providing and fixing hydraulic door closer for doors.
8. Provision of kota stone slab flooring over 25mm thick.
9. Providing and laying 300x300mm or more anti-skid ceramic glazed floor tiles.
- 10 Providing and laying 600x600mm & 800x800m vitrified tiles in various rooms.
- 11 Providing and laying Polished Granite stone flooring in lobby and corridor.
- 12 Providing and fixing 110mm rainwater pipes including necessary fittings
- 13 Provision and fixing calcium silicate false ceiling in all rooms.
- 14 Replacement of G.I. metal ceiling over toilet area at all floors.
- 15 Providing and applying epoxy paint on steel work.
- 16 Providing and applying 1mm thick cement-based putty.
- 17 Provision of acrylic emulsion paints for internal finishing.
- 18 Providing and applying melamine clear polish for all doors and other misc. work.
- 19 Providing and fixing 600x450x200mm white vitreous china laboratory sinks with necessary fittings.
- 20 Providing and fixing 453x357mm mirror of superior glass in all toilets.
- 21 Providing and fixing square-mouth SW gully trap of size 180x150mm.
- 22 Provision of 90x80cm brick masonry manhole
- 23 Provision and fixing powder coated aluminum door and some windows with all necessary fittings.
- 24 Providing and laying water proofing treatment in sunken portion for all toilets.
- 25 Providing and applying integral crystalline slurry for basement.
- 26 Providing and applying SBR polymer bonding coat for retrofitting.
- 27 Providing and fixing factory made single extruded WPC doors for toilets.
- 28 Providing and fixing machine cut polished 12mm thick cuddapha stone slab for wash basin sink area.
- 29 Repair and renovation of some toilets including necessary sanitary fittings & fixtures.
- 30 Providing and fixing galvalume sheets required area in hospital building.
- 31 Providing and applying Dr. fixing dampguard on walls of corridors.
- 32 Providing and placing in position non-shrink, cementitious micro- concrete.
- 33 Providing and fixing of 2mm thick vinyl flexible homogeneous compacted flooring coverings with electrostatic conductive properties for some floors.
- 34 Providing and fixing of flexible vinyl sheet wall covering of 1.30 mm thick for wall cladding.  
Diluting and injecting chemical emulsion CONSTRUCTIONAL anti-termite treatment for doors.

**Details of E &M Works Tentative Scope includes the following**

**B Scope of E&M works (Tentative Scope):**

1. Provision for Internal electrical installation in specific area where false ceiling work is to be executed.
2. Provision for Pressurized mechanical ventilation system in the basement with supply ducts of exhaust blowers
3. Provision for 2 X 250 TR energy efficient central AC plant including low side works complete as required
4. Provision for special repair/replacement Medical Operation Theatre.
5. Provision for special repair/replacement of HT/LT panels  
Provision for Hot water system complete with primary and secondary heat pumps,
6. Hot water returns pumps, heat exchanger, hot water mixing tank, water softening plant, solar water heating system, piping, connection cables, electrical panels i/c all accessories etc. complete as required
7. Provision for rising height of existing DG set chimney

**General Instruction:**

1. Agency shall also have to support in case of emergencies arising due to any fault etc.
2. The Agency will furnish the information about the name & contact Nos etc. of staffs well in advance to user department. the deployed staffs shall have mobile phone and active number. If not, then agency shall arrange to provide the same to them. The Agency will issue the Identity card to the staffs. Any changes in the above shall be informed to ESIS in advance.
3. The Agency shall have to carry out the work of repairs and replacement of parts in good workmanship manner as per standard practice & Rules & Regulations enforce.
4. The site for the work is readily available as the SR work is to be carried out in the running Hospital buildings and their premises having residential buildings and other ancillary structures and the desirous agencies can inspect the Hospital Area on any working day.
5. Additional points if any for compliance of local statutory/ site conditions etc.may please be added to this special condition.
6. The Contractor agency will carry out all Special Repair Works on Deposit Work Basis in accordance with GFR norms, CVC guidelines, CPWD Specifications, BIS Standards and sound engineering practices and also by observing due diligence in all respect.
7. Contractor Agency will make all necessary make shift arrangements for satisfactory running of the services in the Hospital as per the requirements of the ESIS and shall also provide adequate arrangement of transportation to ESIS Representative Engineers/ Officers for monitoring of progress of construction of Special Repair Works (Civil & Electrical) of ESI buildings, plants &equipment's.

8. The site for the work is readily available as the SR work is to be carried out in the running hospital buildings and their premises having residential buildings and other ancillary structures and the desirous agencies can inspect these buildings and premises on any working day.
9. Conditional bid shall summarily be rejected.
10. **Schedule of Credit for Salvage/Demolished Material:** The contractor shall be responsible for the proper dismantling and stacking of all salvageable/demolished materials generated during the course of execution. A Schedule of Credit for such materials shall be prepared and submitted for approval by the Engineer-in-Charge. The value of the salvageable materials shall be credited to WAPCOS/ESIS and appropriately deducted from the contractor's running/final bills, as per the rates specified or as assessed by the Engineer-in-Charge. The contractor shall ensure that such materials are not removed from site without prior written permission from the department.
11. **Execution in a Functional Hospital Environment:** The work is to be carried out in a functional hospital. Bidders are advised to take into consideration the sensitive and operational nature of the hospital while planning and executing the work. Uninterrupted hospital functioning must be ensured during work. Noise, dust, and disruptions must be minimized, and suitable barricading, safety measures, and phased work planning must be incorporated into the execution strategy.
12. The contractor shall provide all GFC drawings, architectural design and drawings, and measurement sheets as and when required by WAPCOS/ESIS for obtaining necessary approvals from the competent authority. No extra payment shall be made to the contractor for this.
13. All necessary approval/license from Central government/State government/Local government body shall be obtained by the contractor. No extra payment shall be made to the contractor for this.
14. For carrying out comprehensive Repairs & Maintenance of its existing infrastructure comprising of Buildings & Services including Equipment and Plants rendering specialized services The contractor will carry out all Special Repair / Checks as per CPWD Specification, CEA/Electricity code and works procedure.
15. Ensuring that the Contractor(s) implement required Health, Safety & Environmental (HSE) practices at the Construction Sites and they also comply with all statutory obligations relate to workmen deployed at the Site like compliance of Labour laws, minimum wages as per CLC, ESI, EPF & Bonus etc.
- H. The contractor shall obtain and assist in Obtaining necessary Statutory Approvals / Permission / Clearances/ Certificates from the concerned Local Bodies & Statutory Authorities like Municipal Corporation, Town Planning Board, Electricity Board / Fire Department, State / Central Pollution Control Boards, State / Central Environmental Authorities etc. as applicable.
- I. Intimating ESIS GOA/WAPCOS about any excess expenditure likely to be incurred over and above the approved estimate and also about possibility of Time Overrun as

soon as it comes to its knowledge along with reasons and justifications thereof for necessary approvals from ESIS GOA before committing / incurring the extra / additional expenditure.

The integration between the functions of the various components based on Office building & its premises requirement is of paramount importance.

**Terms and Conditions:**

1. Agency will adhere to the CPWD specifications, schedule of rates of the CPWD and GFR provisions.
2. WAPCOS on behalf of Director, ESIS GOA shall have the power to make any alterations, additions or substitutions in the original specification's drawings, designs and instructions that may appear to him to be necessary during the progress of the work and Agency shall carry out the work in accordance with any instructions which may be given to them in writing by the Director, ESIS GOA and such a course of action shall not invalidate the contract.
3. Any deviation in the work arising from changes in design and specifications shall require prior approval of WAPCOS/Director, ESIS Goa. However, extra or substitute items resulting from such changes shall fall within the scope of the Executive Agency. Variations in quantities of items shall be accounted for in the work with due approval of the Director, ESIS Goa/WAPCOS. All such deviations and variations shall be governed in accordance with the provisions of "Clause 12: Deviations / Variations – Extent and Pricing."
4. Agency shall not transfer funds or materials so procured temporarily or otherwise to any works other than ESIS GOA works.
5. It shall not be permissible for agency to apply without the sanction of the WAPCOS/Director, ESIS GOA any anticipated or actual saving whether due to the abandonment of part of work or to any other causes, on a sanctioned estimate of a definite project to carry out additional work not contemplated in the original project or fairly contingent its actual execution.
6. Notwithstanding anything contained above, WAPCOS/ Director, ESIS GOA will have the authority to foreclose the agreement and seek alternative construction agency if work is not executed as per schedules or specifications.
7. Any time extension for completion of the work due to genuine reason shall require prior approval of WAPCOS/ Director, ESIS GOA.
8. Agency in the agreement means any contractor appointed by WAPCOS Ltd.
9. Agency/Contractor shall strictly adhere to all relevant statutory provisions as may be applicable for such work award.

## TECHNICAL SPECIFICATIONS FOR MODULAR OPERATION THEATRE

### Scope of Work:

Modular OT comprising of anti-microbial, intensive infection control environment, sterile panel walls & ceiling system, seamless conductive antistatic dissipative flooring, clean air laminar flow, touch screen surgeon's control panel, electrical isolation and distribution system, X-ray viewing screen, hatch box, hermetically sealing automatic sliding doors, anaesthesia & surgeon pendants and Medical Gas pipe line with AGSS work inside OT with AVSU, scrub station.

### Technical Specification:

#### 1. CEILING PANELING: -

- I. Ceiling tiles should have a standard module sized with minimum 600 x 600 mm or 600 x 1200 mm.
- II. Installation Ceiling should create a tight space with clip-in type ceiling system.
- III. The ceiling plates /cassettes should be made up of High quality galvanized or powder coated steel 0.6- 0.8 mm thick, and powder coated by any of RAL colour.
- IV. The ceiling suspension should be as follows:
- V. Support elements: Suspension bracket with tension spring
- VI. Suspension Height: Continuously adjustable from 250 to 1100 mm
- VII. Stability: Permanent and non-stop after adjustment.
- VIII. Material: High quality powder coated galvanized steel
- IX. Room lighting, air supply inlet, ceiling service units; return air outlets, etc. as should be integrated with metal ceiling system.
- X. The individual panels except those at the edges should be removable individually. The ceiling mechanism should be designed to ensure air tightness. No silicone gel should be used for sealing purpose.

#### 2. WALL PANELING: -

- I. Should be manufactured in multi-layer technology.
- II. From the front top and bottom the edges of the sheet are bent back at right angles. The side edge should be made bent-shaped edge, which should be used for invisible mounting of panel on the base structure.
- III. The wall panels should be reinforced by Gypsum plasterboard (FRMA or FRMR) with a thickness of 12 – 18 mm.
- IV. The wall panels should be manufactured with minimum sheet thickness of 0.8 - 1 mm.
- V. The design of panels must allow easy disassembly to carry out additional changes in the plan and buildings.
- VI. Wall panels made of: Stainless steel chrome-nickel steel material EN 1.4301 powder-coated by any of RAL colour with the addition of silver ions, which are embedded in the cover of panels during their production.

VII. The use of nanotechnology should provide 24-hour protection against bacteria, fungi and Mold, including *Staphylococcus aureus* resistant to methicillin, *Salmonella*, *Pseudomonas* and *Legionella* colon. The anti-microbial testing certificate should be submitted validated and certified through accredited testing laboratory.

VIII. The vendor should submit the sound penetration test certificate up to 45 dB and fire rating of minimum 25 min for the wall panels tested through third party accredited institution.

IX. Panels mounted on a structure made of galvanized steel 1.5 – 2 mm Thick vertical square pipes should enable the distribution of medical gases, electricity and sewerage inside the wall. No cut or slotted sections to be used. The flooring rails should be made of high-quality galvanized steel 1.5 -2 mm thick fastened to the raw flooring available on site. The minimum height of the floor rails should be 100 mm from the base floor.

X. The vertical elements of the corner (concave and convex) should be manufactured from a single element.

XI. The joints between the panels should not be more than 6 – 10 mm and should be provided with antimicrobial silicone airtight seal which are embedded in the coating seals during its production.

XII. The gasket should be resistant to UV light, detergents, bactericides, water, steam, and means used for disinfection of operating theatres.

### **3. PVC FLOORING (INCLUDING SELF LEVELLING):**

Providing, Fixing, Supply and Installation of seamless static conductive flooring system, 2 mm thick, with perfectly curved flash covings, all joints welded as per the color and pattern approved by hospital. The tiles are to be laid on the smooth sub floor done with a suitable self-levelling compound.

a. It should be with 2mm antistatic seamless PVC flooring.

b. Floor should be smooth, non-slip, impervious material conductive enough to dissipate static electricity but not conductive enough to endanger personnel from electric shock.

c. Continuous rolls should be used, and joints should be welded by special PVC thermal welding units using PVC welding bars of same colour.

d. The sheets should be highly durable with resistance to shock and indentation. It should be Scratch proof also. The conductive material should be uniformly impregnated as grains.

e. It should be inert to body fluids. Chemicals and disinfectants. Should not be affected by temperature variation within the OT.

f. Self-levelling compounds should be used.

g. The conductive copper grid laid underneath the PVC sheet should be supported by liquid epoxy compounds allowed to set as a uniform and level surface. The copper strips to be made visible by grinding and no copper strip should project more than 0.5mm above level surface to avoid damage to the PVC sheet. One earthing lead should be brought out from OT area and attaching it to the main earthing strip/ground.

h. Corners should be uniformly curved.

i. Final surface should be non-corrosive to biological fluids and detergents.

**Technical specifications: -**

Providing Permanently Static Dissipative pressed homogeneous vinyl flooring (EN 649), wear layer thickness is 2mm (EN429), PVC Vinyl flooring having Carbon backing and with total weight 3000 g/m<sup>2</sup> (EN 430), XR PUR (polyurethane reinforced), phthalate free, Abrasion group P:≤4,0mm, residual indentation approx. 0,02 mm, castor wheel test qualified, dimensional stability ≤0.40%, static electrical charge < 2kv, good resistance of scratch, slip, chemical and fire, doesn't Favor in growth of fungi. Electric resistance is as per EN 1081 and ESD approved. Restorable properties. Available in rolls. 100% recyclable. Low VOC emission after 28days of installation (lower than ≤100µg/m<sup>3</sup>). Non-Directional in Design.

**4. SURGEON CONTROL PANEL WITH TOUCH SCREEN: -**

The control panel in operation theatre rooms to display the operation time, time of the day, controlling and displaying temp and humidity, medical gas alarm, telephone etc.

**Surgeon Control Panel with Touch Screen: -**

- The touch sensitive monitor having screen size 27'' which operates and monitors OT parameters like temperature, humidity. The graphical interface is capable of displaying all kinds of complex topologies. The status and command information is presented in a manner that is well structured and clear. The android-based software is both modular and flexible, enabling it to be adapted or expanded, or to accommodate new technologies. The touch screen comprises of the following features:
- Daytime Digital Clock Elapsed.
- Time Digital Clock
- Anaesthesia Countdown (Reverse Countdown)
- Temperature & Humidity Indicator
- Peripheral & OT Light Controller
- Medical Gas Alarm (Hi/Low/Normal)
- Hands Free Telephone
- Music System
- Room Differential Pressure
- HEPA Filter Status

**TECHNICAL SPECIFICATIONS: -**

- a. Cut-Out Dimension: 700mm X 700mm x 165 mm
- b. Circuit Voltage: 24 V & 12 V DC.
- c. Digital Clock: (HH:MM:SS).
- d. Elapsed Clock: (HH:MM:SS) (Start-Stop-Reset).
- e. Anaesthesia Clock: (HH:MM:SS) Reverse Countdown. Separate switch for Display ON/OFF.
- f. Light Control: 3 Channel (2 for peripheral light & 1 for plan air) 0-10 V Dimming Range 2 Channel (2 for OT Light On/Off) and 2 OT Light.

- g. Temp./Humidity: Display Room Temperature and Humidity.
- h. Gas Alarm: 5 Channel (4 Gases +1 Vacuum), (High/Low/Normal/ Indication).
- i. Hands Free Phone: Dialling & Receiving calls with Caller ID.
- j. HEPA Filter: Shows HEPA Filter Status (Normal/Choke)
- k. Music Player: Plays MP3 & supported files through wired and Bluetooth transmission.

**Standards: -**

- a. CE Marked
- b. Complies with EMC Directive 2014/30/EU
- c. Machinery directive 2006/42/EC

**5. X RAY FILM VIEWER:**

Providing, Fixing, Supply, Installation, Testing and Commissioning of 2 panel dimmable X-Ray viewing screen designed to provide a high level of control luminance without flicker.

- LED type flat panel X-ray viewing panel should be supplied.
- This should be a 2-panel viewing screen.
- Mounting should be flush with the wall to avoid dust accumulation and growth of organisms between wall and panel.
- Body should be of extruded aluminum powder coated with bacterial resistant and disinfectant resistant finish.
- The diffuser on the front panel should be a uniformly lit screen.
- Dimming electronic control should be enclosed at the bottom of the cabinet.
- Proper spring-loaded film clip with rollers should be provided to hold the films firmly and to remove the film without scratches.
- Each panel should be able to illuminate films up to 14"x17" size. (Total 2 panels).

**Standards: -**

- a. CE Marked.
- b. Complies with directive 2014/35/EU, & 93/42/EEC

**6. AUTOMATIC HERMETICALLY SEALED SLIDING DOORS:**

Providing, Fixing, Supply, Installation, and Commissioning of Automatic Hermetically sealing sliding. Doors 2100 X 1800mm and 2100 X 1000mm with the following specifications: -

- a. It should be a hermetically sealed, single sliding door.
- b. The controller should be capable of being operated by elbow switch/foot switches as well as touch less sensor.
- c. The track should be of Aluminum and the running surface for the top rollers should be suitably angled to reduce resistance to movement.
- d. The door leaf should be hung by means of hard plastic rollers of high quality with double bearing at the top. Rollers should be provided under the Aluminum track to enable smooth and noiseless movement.
- e. Opening and closing of the door should be microprocessor controlled electromechanical movement.

- f. The door material should be of GI / HPL Colour, should match the interior and care should be taken to make the leaf strong and light weight.
- g. One should be able to open and close the door effortlessly in case of failure of automatic mechanism. Door Opening handle should be strong and sturdy.
- h. Material should be of SS (gloss finish). Should be provided with high quality cylindrical lock.
- i. Door Leaf should have high quality synthetic rubber gasket with long life to ensure hermetic sealing (to maintain air pressure differential). Air tightness 99.99% at a pressure of 100Pa.
- j. The finished floor on either side of the door should be perfectly level (maximum permissible difference is +/-1mm).
- k. The overall thickness of the finished door should be 60mm. The inner part of the door should be filled with cfc free polyurethane foam thickness of 52 mm nearby.(Sealed airtight to prevent further ingress of any microbial organism).
- l. The Door and control should be comply with IEE regulation. SDA04 automation with battery backup (PMDC Motor).
- m. Door should be with vision window 300mx300mm with double glazed panels and hermetically sealed.
- n. Door movement should have minimum noise.
- o. The starting time after receiving the signal should be adjustable between 0.5 to 20 seconds.
- p. Test certificate for hermetically sealed door frame (factory test certificate) should be enclosed with the pre dispatch documents.

**Standards: -**

- a. EN 6100-6-3, EN 61000-6-2, EN 60335-1

**7. PRESSURE RELIEF DAMPER:**

Providing, Fixing, Supply Installation and Commission of proper Pressure Relief dampers having multi 304 graded stainless-steel blades for maintaining the positive pressure inside the operation theatre.

Specifications of PRD include: -

- a. Ideal for maintaining differential room pressure, when doors are opened between clean rooms & external atmosphere.
- b. Remains closed at pressure below the set pressure & open fully at pressure only fractionally above the threshold.
- c. Pressure relief dampers of overflow ports should be provided in each operating room.
- d. Suitably sized air pressure relief damper should be strategically placed, enabling differential room pressure to be maintained and ensure that when doors are opened between clean and dirty areas.
- e. Counter – weight balancing system should be provided in the PRD to maintain positive pressure inside the operation room.

**8. WRITING UNIT/WHITE BOARD:**

The Supply and Installation of the writing board for the clean rooms is used for writing down information by doctors / technicians. The magnetic writing board is flushed into the clean room wall. The board is also coated with an antimicrobial coating making it useful for all clean rooms.

SIZE: 845 X 550 X 29 mm, Cut out SIZE: 825 X 530 mm

### **9. PASS BOX/HATCH BOX**

The Supply and Installation of Static Pass Boxes with The Following features: -

- a. Outer Dimension: 570 X 500 X 600 mm with Working Area: 450 X 450 X 450 mm (or as per user requirements)
- b. Grade: SS 304 with 1.2 mm Double Skinned Door with Matte Finishing With 4 mm Thick Toughened Glass.
- c. Protected with Electro-Magnetic Locks. LED Light/ UV Light.
- d. Electrical On/ Off Switch with Both Side Displays. Polycarbonate/ Glass Side Panel as Per Requirement.
- e. Electromagnetic Type Interlocking Systems on Both Sides.

Standard: -

- a. Complies with Directive LVD-2014/35/EU; & 93/42/EEC

### **10. PERIPHERAL LIGHTS**

Supply and Installation of Peripheral lights in operation theatre:

- a. Are to be Designed Anti-Glare.
- b. These lights are designed specially to facilitate the seamless design of the operation theatre.
- c. Lights are must be IP 65 Protection Grade.

Technical specifications:

Colour Rendering: >90%

Efficiency: >85%

Colour Temperature: 4000K

Maximum Surface

Luminance: >1300 Lux

Dimensions: 300mm X600mm

### **11.LAMINAR AIR FLOW SYSTEM:**

Providing, Fixing, Supply, Installation, Testing and Commissioning of Laminar air flow system.

Plenum Unit with 2440x2440mm: The complete unit shall have factory prepared fine sealing system. It will be perfectly seamless integration of ceiling mounted equipment and OT Ceiling. It will be flexible modular range of solutions, adjustable to the local requirements. It will be made out of high quality and durable materials, filter housings

and pressure chamber are made out of Aluminum. It will have a low pressure drop that allows for the long-term usage of the HEPA. Air diffuser made out of SS-304 perforation for the plan air ceiling to give a "LAMINAR FLOW" of filtered air.

Air filtration and distribution system for operation theatres, with vertical unidirectional air flow from the centre to the edge of the ceiling to ensure the cleanliness of all the area covered by the air flow.

Plenum shall be complete with 8 Nos. DOP tested point scanned HEPA Filters having efficiency better than 99.97% down to 0.3-micron particle size. Capacity of each filter 500 CFM. Total capacity of each Plenum 4000CFM @80% of design capacity).

Maintenance of filters shall be from bottom i.e. from OT room.

D.O.P. tested point to point scanned MINIPLEAT HEPA FILTERS having following technical specifications to be fixed in above Housings:

Frame – Aluminium.

Type – Flange Type.

Media – Microfiber Glass.

Sealing of media – By means of epoxy.

Efficiency – 99.99% down to 0.3-micron particle size.

I.P.D. -< 15 mm WG.

F.P.D. – 50 mm WG.

Separators – Concealed Al. or Hot melt Glue.

Capacity – 600 CFM

Top plenum is conforming to DIN 4799 standards for the air distribution system complete.

## **12. AIR HANDLING UNIT WITH OUTDOOR UNITS**

Providing, Fixing, supply and installation, testing and commissioning of AHU.

a. Supply of Sheet metal sectionalised cabinet type air handling unit in Double skin construction with 0.6mm GI inner skin & outer skin of 0.6 MM PREPAINTED GI.

b. The AHU shall be with Thermal Break Profile with internal coving section.

c. PUF insulation shall be injected with minimum 38 Kg. /cum. density in double skin panels, 43±2 mm thick., fabricated from Al extruded section frame structure.

d. The AHU consist of vibration isolator, access doors, view glass, limit switch, suitable openings in AHU, fresh air intake with filters, marine lights in all sections etc.

e. AHU shall have D profile gaskets of approved MOC. complete with following section with aluminum damper for Supply, Return & F.A

f. Prefilter section with Pre filter (5 Micron & 95 % Efficiency). The maximum depth of the filter

shall be limited to 550mm.

g. DX / Chiller Type Cooling coil section 6RD Coil & heating system with Strip Heater or Coil, cooling coil with mist eliminator duly mounted on insulated SS drain pan & header drain connection.

h. Blower section consists of direct driven Plug Fans of suitable capacity and 150mm WC Static Pressure. Blowers & motors should be mounted on common frame.

i. Micro vee filter section with M.V. filter In Aluminium construction (3 Micron & 99

- % Efficiency) The maximum depth of the filter shall be limited to 550mm.
- j. Fresh air Module with ALUMINIUM volume control damper with marking and locking arrangement Volume control dampers shall be with extended shaft suitable for mounting of actuator and 10 Micron Filter (90 % Efficiency).
  - k. Sandwich type insulated drain pan, drain pan will be 18 G SS construction.
  - l. Mixing chamber will be of minimum 500 mm.
  - m. Coil section will be of minimum 500 mm.
  - n. Blower section length will be as per standard dimension of the blower required to install the blower in housing.
  - o. After blower and before Micro vee filter there will be gap of 500 mm.
  - p. After Micro vee filter and before main discharge there will be gap of 500mm.
  - q. There will be access door across every section of AHU.
  - r. The face velocity across cooling coil will be limited to 152 MPM max.
  - s. 4000 CFM / 125 MMSP/ required capacity as per requirement outdoor will be installed.
  - t. AHU and accessories are subject to strict inspection criterion and the manufacturing unit is accredited in accordance to 2006/42/EC, ISO 9001:2015.

### **13. DOUBLE ARM SURGEON PENDANT**

Providing, Fixing, supply, Installation, Testing and commissioning of Surgical Double Arm pendant with the following specifications: -

- 1) The support arms should be extremely robust and revolve on high quality bearings, so that the pendant head glides smoothly and quickly to any desired position.
- 2) Approx. 1000 mm + 800 mm moveable arms each with 330 deg.
- 3) Weight carrying capacity of the arm should not be less than Single Arm- 80 Kg, Double Arm- 240 - 270 Kgs.
- 4) Each arm should be capable of 300-340 degrees of rotation, which can be easily adjusted to suit the desired mode of operation.
- 5) The Pendant Service heads should be supplied with 10 Nos. of 15 Amps. Sockets. Rated Voltage:220V, Rated Frequency:50HZ; Input Power: 5KVA, Fitted with: 4 nos. of Working Platform (Height Adjustable), 1 no of Handled drawer of Round Angle Design for Prevention of Collision.
- 6) The Pendant Service heads should be supplied with medical gas terminal units of same make.
- 7) The pendants should be European CE or USFDA certified.
- 8) It should be Class II b acc. MDD 93/42/EEC, appendix IX UMDNS Code: 18-046
- 9) The medical outlet should also have CE0123 & Class II B certified of same make.
- 10) Each pendant should have:
  - \_ Oxygen 2 nos
  - \_ Vacuum 2 nos
  - \_ Medical Air 4 bar 1 no
  - \_ Medical Air 7 bar 1 no
  - \_ CO2 1 no
  - \_ Stainless steel I.V.- 1 Set

- \_ Grounding terminal 2 nos
- \_ Data socket RJ -45 – 1 no
- \_ RS232- 1 no

**14. DOUBLE ARM ANAESTHESIA PENDANT:**

Providing, Fixing, Supply, Installation, Testing and commissioning of Anaesthesia Double Arm pendant with the following specifications:

- 1) The support arms should be extremely robust and revolve on high quality bearings, so that the pendant head glides smoothly and quickly to any desired position.
- 2) Double moveable arms with total coverage of 1000mm + 800mm and 330 deg.
- 3) Weight carrying capacity of the arm should not be less than Single Arm- 80 Kg, Double Arm- 240 - 270 Kgs.
- 4) Each arm should be capable of 300-340 degrees of rotation, which can be easily adjusted to suit the desired mode of operation.
- 5) The Pendant Service heads should be supplied with 10 Nos. of 15 Amps. Sockets. Rated Voltage:220V, Rated Frequency:50HZ; Input Power: 5KVA, Fitted with 1 no. of Working Platform, Height Adjustable, 1 no. of Handled drawer of Round Angle Design for Prevention of Collision.
- 6) The Pendant Service heads should be supplied with medical gas terminal units of same make.
- 7) The pendants should be European CE or USFDA certified.
- 8) It should be Class II b acc. MDD 93/42/EEC, appendix IX UMDNS Code: 18-046
- 9) The medical outlet should also have CE0123 & Class II B certified of same make.
- 10) Each pendant should have:
  - \_ Oxygen 2 nos.
  - \_ Nitrous-1 no.
  - \_ Vacuum 2 nos.
  - \_ Medical Air 4 bar 1 no
  - \_ Medical Air 7 bar 1 no
  - \_ AGSS Outlet 1 No
  - \_ Stainless steel I.V.- 1 Set
  - \_ Grounding terminal 2 nos.
  - \_ Data socket RJ -45 – 1 no
  - \_ RS232- 1 no

**15. STORAGE UNIT:**

Providing, Fixing, Supply, Installation, and Commissioning of Storage Unit with the following specifications: -

- a. The storage unit should be made with 1.5mm thick stainless steel 304 panels.
- b. The storage unit should be divided 2 or 3 parts.
- c. Each Storage Section should have Adjustable glass shelf.

d. The overall size should be approx. 1700mm H X 1200mm W X 350mm D or as per user requirements.

**16. ELECTRICAL SYSTEM INSIDE THE OT:**

- a. Laying conduits, Switch Boxes, Switch plates, Power and Light Electro Multi-Plug Sockets, including Wiring, earthing all the lighting controls, pendants and other equipment fixtures and fittings complete as per approved design.
- b. All equipment should be fully and permanently labelled to identify and describe the function, operation and voltage of the apparatus concerned.
- c. Anti-bacterial switches.

**17. MEDICAL GAS PIPELINE SYSTEM INSIDE THE OT:**

It should be ensured that all works carried out inside the OT as per layout requirements and as per Anaesthesia & Surgical Pendants locations: -

- a. It should provide Oxygen, Air, Vacuum, AGSS, and Nitrous Oxide supply to Operation Theatres from the existing lines terminated outside the OT.
- b. Terminal units should be gas specific and only accept the correct Medical gas probe.
- c. Each terminal unit and pipeline should be identified by the appropriate recognized name or symbol, color, coding and shape as per HTM 02-01/NFPA 99C.
- d. Medical Grade Copper Pipe for Medical Gas Pipelines conforming to BS: EN: 1057:2006 on Half Hard conditioned suitable for Medical Gas Pipeline use duly certified by Lloyd's.

**18. AREA VALVE SERVICE CONTROL UNIT: -**

Providing, Fixing, Supply, Installation, and Commissioning of Area Control Unit with the following specifications: -

- a. Area control units are monitor the medical gases and vacuum pressures in hospital/OT.
- b. 1 to 5 gases with minimal space requirements
- c. Electronic pressure sensor
- d. Modular design for attaching to external monitoring systems
- e. Transmission of all alarm messages and pressure measurements
- f. Variable alarm levels
- g. Compliance with EN ISO 7396-1
- h. The Area Control Units equipped with all medical gases and vacuum to meet the requirements. The compact base manufactured from stainless steel can be easily integrated in modern lightweight walls or mounted in or on conventional walls.
- i. Use In Case of Emergency: In case of emergency, the door of the Area Control Unit must be opened by striking the emergency access button. The clearly organized valves can then be quickly and safely shut off. If there is an interruption in the gas supply, the emergency inlet is used to maintain the supply.

j. Monitoring: Pressure sensors electronically monitor all gas pressures. Optical and acoustical alarm functions immediately indicate any abnormalities. Pressures are also displayed by means of a manometer – independently of the power supply. The analog pressure values can be transferred to an external system.

k. Flexible Integration: The Area Control Unit can be equipped with various interface modules that transfer the alarm and pressure measurements to an external system. Relay modules ensure potential-free contacts for each alarm signal. The alarm system interface integrates the Area Control Unit into the Alarm Management System.

**Technical specifications: -**

Dimensions (mm): Valve box base: 430x92x430 (BxWxH)

Valve box top: 452x52x452 (BxWxH).

Power Supply: 230 V

Components: Medical Gases (O<sub>2</sub>, Air, N<sub>2</sub>O etc.)

Compressed air to run medical tools

Vacuum

Alarm system-Interfaces: Potential-free contacts (relay modules)

Display of pressure measurements on a building management system.

medical gas and vacuum pressures of all functional departments

**19. ALUMINIUM DUCTING:**

Aluminum Ducting (22 gauge) with curves & bends where indicated for easy flow of air, made air tight by applying silicon sealant after fabrication. Hangers will be provided to ducts & will be suspended by means of G.I. coated rod & these will not be more than 2.5 mtrs apart. Thermal insulation with 9mm XPE with aluminum foil for supply & return air ducts. Joints will be lapped with Nitrile tape for better insulation. (Laminar to AHU & Return air in all four corners) AHU to be placed near OT.

**20. AUTOMATIC SCRUB STATION:**

Providing, Fixing, Supply, Installation, Testing & commissioning - Scrub Sink with following specifications:

a. Compact surgical scrub sink should be designed for use in OT complex providing for pre procedural scrub up. (Double sink combination as suitable).

b. Each fixture should be fabricated from heavy gauge type 304 stainless steel (minimum thickness 1.5mm) and should be seamless welded construction, polished to a mat finish.

c. The scrub sink should be provided with a front access panel which should be easily removed for access to the water-controlled valve, waste connections, stoppers and strainers.

d. Hands free operation should include infra-red sensors with programmable adjustment.

e. Thermostatic mixing, valve control should be located behind the access panel and maintain constant water temperature.

f. Timing should be adjustable to meet individual application requirements.

- g. All units should have reduced anti-splash fronts.
- h. Foot operated lever should be provided additionally for manual operations.

## **21. Modular OT with Integration OR Integration System**

### **GENERAL FEATURES:**

1. Full High-Definition minimum 32 inch or more medical grade monitor
2. Wall-mounted flushed in the wall for display of live transmission of images and video sequences from the Operation Theatre.
3. It should be compatible with existing OT Light and OT Light surgical camera.
4. It should have provision to record the images and video sequences from OT.
5. The Full High- Definition Digital Documentation System should be a high-end computer system based on Windows embedded platform designed specifically for recording, managing, and archiving surgical images and video. Managing should be done in 4K/UHD resolution and recording & archiving in FHD resolution.
6. The captured full high-definition images and videos can be accessed from the hard drive for printing or saving onto multiple forms of external media which includes CD/DVD, USB Flash Drive, and Hospital network.
7. It should be connected to the HIS and PACS.
8. It should be able to preview and simultaneously record views from two FHD video sources parallel and archive as single patient file
9. It should have at least 2 TB internal Hard Disk Drive for in-system archiving.
10. It should have a feature of real time in-procedure DVD burning/USB pen drive besides at-the-end procedure DVD/USB pen drive.

### **2 Commercial Grade Monitors:**

- a) Medical/Commercial Grade Monitor: 55-inch or more, of 4K (minimum resolution of 3840 x 2160) resolution, to be mounted on OT wall- Qty. 01 no. per integrated MOT
- b) Bidder shall provide the room PTZ HD camera for the OT status
- c) Bidder should provide the additional 55" 4K commercial grade display in surgeons lounge for access to different OT's devices
- d) The entire system should be controllable through software.
- e) The main control system should be software driven and should be accessed via a one of the Medical/ Commercial grade monitor from inside the operating room.
- f) It should also be controlled via a silicon medical grade keyboard and mouse.

### **Audio Video Communication System:**

- a) All AV signals of MOT (in SD, HD, full HD, 4K resolution) should be transmitted to Conference room/ Doctors lounge from the integration system for video conferencing and live transmissions. The system should be capable of streaming Full High Definition/4K video and audio in each OR, over Local Area Network for teaching & consultation purpose.

- b) The Audio-Video system should have minimum 4x4 Digital architecture having compatibility of signals like SD, HD, FHD, 4K, etc. The routing/Switch system should be able to integrate Full HD/HD/SD/4K signals (e.g. Room Camera/OT Light Camera/ Endoscopic Camera/ Recorded Videos/etc)
- c) Audio-Visual system should receive the signal from different sources like Room camera, Endoscopy camera, OT Light camera, Auxiliary devices like C-Arm, Video Microscope, Mobile ultrasound, Anaesthesia workstation, AUX-IN, 3.5mm (Audio) in & video conferencing to be provided with a rechargeable wireless microphone (Qty. 2 per OT)
- d) The routing system should allow selection of multiple views for simultaneous transmission in QUAD or PAP format
- e) The System should be able to receive and transmit PACS Data.
- f) All patch panel work required for Hardware of OT Integration system should be in the bidder's scope of work
- g) Audio-Video bidirectional Conferencing system should be offered and the system should be able to transfer high-quality real-time images and audio signals from multipoint (minimum 4 parties). The system should be able to transmit (SD, HD, full HD,4K) signals over the IP Service and also through fibre optic offline transmission.  
The video conferencing system of the integration system should be capable of sending and receiving of any VC call through IP. All MOTs should be capable of dialling VC calls and receiving VC calls and simultaneously.

**Control System cum Digital Documentation:**

- a) One 4K (minimum resolution of 3840x2160) colour monitor LED/LCD control monitor (55-inch or more) should be integrated with the system to be mounted on OT wall-01 no. per integrated MOT
- b) Should have facility to dual channel record the images and video in OT  
The Digital Documentation System should be a high-end, computer system based on Windows or better embedded platform (for security purposes) designed specifically for recording, managing, and archiving surgical images and video in native (full HD,HD,SD,4K) resolution. The captured images & videos can be accessed from the hard drive for printing or saving onto USB Flash Drive & Hospital network.
- d) It should have at least 2TB internal Hard Disk Drive (HDD) for in-system archiving. Also, able to automatically transfer the data to storage server present Hospital Network. It should be able to preview and simultaneously record views from two video sources parallel and archive as single patient file.
- e) Patient and image data should be distributed to required monitors in the operating room
- f) System should be able to document patient data and user configurable options for different procedure. The integration system offered should be connected with PACS & HIS. It should be DICOM and HL7 compliant.
- g) User could see an "ON AIR" indication prominently on screen while streaming
- h) Capability to stream images and videos in real time from OTs to clinician's desktop and/or laptop located in OPD/faculty room within the institute should be provided.

Hospital will provide required network connection for the same in OPD/faculty room. Networking hardware and software for the same should be provided by the vendor.

## **22. Specifications OT light with camera**

1. Lights should have illuminance: 160000 Lux + 160000 Lux.
2. Colour Temperature: 3200 K, 3800 K, 4400 K, 5000 K to 5600 Kelvin in five steps.
3. Light field diameter: 5.5"/ 6.7"/ 8.3"/ 9.8"/ 11.8"
4. Colour Rendering Index Ra: 99- 10%; Colour Rendering Index R9: 98-100, Colour Rendering Index R13: 99 to 100.
5. Illumination depth L1 + L2 (20%): 1300 mm to 1320 mm.
6. Illumination depth L1 + L2 (60%): 750 mm to 800 mm.
7. Should have synchronisation mechanism between two domes for easy controlling.
8. Anti-Glare modes must be available to reduce eye fatigue during long duration surgeries.
9. Should have endo light mode.
10. 3D shadow compensation using camera other than optical sensor for efficient shadow compensation.
11. Sterile Touch Control (STC) handle control
12. Should have the option to preset light controls.
13. LED lifetime must be more than 60,000 hours.
14. Sterile touch control must be available to maintain infection control.
15. LED module replacement must be possible to reduce service / maintenance time.
16. Gimbal mount OT light control in the OT light dome handle must be available for easy access and operation for one dome
17. Lights should comply to IEC 60529, IEC 60601-1, IEC 60601-2-41, IEC 60364-7-710/VDE 0100-710.
18. Lights Should conform to CE and comply to EN ISO 9001 and EN ISO 13485.
19. OT light dome should have Upgradable to integrated Medview 4K advanced with zoom 12x digitally or 240x (20x optically,12x digitally) and quoted as optional item and price will be freeze for next 5 years and below facility should be available in quoted Camera.

20. Camera should have an option for wired / wireless with a range of range: 15 m, 590.5 in) transfer.
21. Camera should have Full HD Sensor: 1" CMOS for low noise + great dynamic range,4K UHD (8 Megapixel) + excellent Full HD output, Professional XDCAM codec support, better low light performance & dynamic range, Advanced codecs like XAVC, ProRes, RAW options in cinema model, HD: Up to 120 fps+ (for slow motion)
22. Camera must be integrated in the OT light dome.
23. Camera should have autofocused option.
24. Camera should have options like Rotate, mirror, freeze image, zoom, exposure, manual focus.

#### General Notes

1. All items shall include necessary accessories and fittings required for satisfactory operation.
2. Equivalent makes / models from reputed manufacturers shall be acceptable.
3. Materials used shall be suitable for hospital and OT environment.
4. All works shall be carried as per relevant applicable standards and approved engineering practices.

## **SECTION IX**

### **LIST OF APPROVED MAKES**

#### **LIST OF MAKE**

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, the Contractor can use

the alternative makes only BIS marked materials. Non BIS marked materials may be permitted by the WAPCOS only when BIS marked materials are not manufactured.

**CIVIL WORKS**

<b>S.NO.</b>	<b>NAME OF ITEM</b>	<b>MAKE APPROVED</b>
1	ORDINARY PORTLAND CEMENT GRADE 43/53, PORTLAND POZZOLONA CEMENT	JK, ACC, ULTRATECH, JAYPEE, SHREE, AMBUJA,
2	WHITE CEMENT	JK, BIRLA, ACC, JAYPEE, AMBUJA
3	REINFORCEMENT STEEL	TATA , SAIL, RINL, JINDAL, JSW STEEL
4	PLY / BOARD / MDF	DURO, MERINO, GREEN PLY, AGNI , KITPLY, CENTURY
5	LOCK/BRASS FITTING	DORSET, DORMA, OZONE, GODREJ, HAFELE
6	WALL PUTTY	JK, BIRLA, ACRO, BERGER
7	STRUCTURAL STEEL/TUBULAR TRUSS	TATA , SAIL, RINL, JINDAL, APOLLO
8	PAINT/POLISH/ PRIMER/WATER PROOFING PAINT	BERGER, ASIAN, DULUX, NEROLAC
9	POWDER COATING	AKZONOBEL, ASIAN
10	EPOXY PAINT/ WATER PROOFING WORKS	FIBREX/BASF/ SIKA/FOSROC/PIDILITE/REDWOOP
11	FLOOR & WALL TILE(VITRIFIED & CERAMIC)	KAJARIA, ORIENTBELL ,SOMANY, NITCO
12	GLASS / MIRROR	ASAHI, SAINT GOBAIN, PILKINGTON, MODI GUARD
13	CONSTRUCTION/WATERPROOFING CHEMICAL, ADMIXTURES	ROFFE, FOSROC, SIKA, ULTRACON, PIDILITE/REDWOOP
14	ANTI TERMITE	VAM ORGANICS, PYRAMID, TERMISOL
15	GRID FALSE CEILING & WALL PARTITION	ARMSTRONG, DEXUNE, NEW AGE, HUNTER DOUGLAS, SAINT GOBAIN, DIAMOND FALSE CEILING TILES
16	GYPSUM WALL PARTITION/CEILING	BORAL, INDIA GYPSUM, GYPROC, SAINT GOBAIN, DIAMOND FALSE CEILING TILES
17	FLUSH DOOR	DURO, CENTURY, MERINO, ARCHIDPLY, AGNI
18	DOOR FITTINGS & FIXTURES	DORMA, OZONE, DORSET, EBCO, HAFELE
19	GLASS/SS HANDRAIL	DORMA, OZONE, DORSET
20	ALUMINIUM SECTIONS	JINDAL, BHAROUKA, HINDALCO
21	XPS INSULATION	OWENS CORNING
22	GLASS PROCESSING	GOLDPLUS, GSC

23	MODULAR FURNITURE	GODREJ, BP ERGO, FEATHERLITE, WIPRO
24	VENEER/LAMINATE	MERINO, CENTURY, AGNI, DURO, GREEN, ARCHIDPLY
25	SIGNAGES	3M, XENON OR EQUIVALENT
26	UPVC DOORS AND WINDOW	FENESTA, LINGAL, DECEUNINCK, ENCRAFT, DUROPLAST
27	PAVER BLOCK/KERB STONE OF M30 GRADE AND 60 MM THICK	NITCO, UNITILE, NIMCO OR EQUIVALENT
28	FIRE RETARDANT PAINT	NULLIFIER/SIGNUM/GODREJ/NIPPON/CARBOLINE
29	FIREDOOR	SUKRI, NAVAIR, DORMA
30	FIRE RATED GLASS	SCHOTT (GERMANY) AND EQUIVALENT
31	PIPES RELATED WORKS	REFRE MAKE LIST FOR PHE WORKS
32	STAINLESS STEEL ( GRADE 304) RAILING MADE OF HOLLOW TUBES, CHANNELS, PLATES ETC	JINDAL, TATA, MONNET
33	ACP	VIVA, ALSTRONG, ALUDECOR, ALUCOBOND, VIRGO
34	REINFORCEMENT COUPLER	SNTP, DEXTRA, MOMENT, LENTON
35	EXPANSION JOINT	KOHINOOR ENTERPRISES, MIGUA, CS
36	WATER PROOFING AGENCY	SIKA, FOSROC, BASF, PIDILITE/REDWOOP

**ELECTRICAL WORKS**

<b>ITEM</b>	<b>MANUFACTURERS NAME</b>
AIR CIRCUIT BREAKER	SCHNEIDER /SIEMENS/ L&T/ABB
MOULDED CASE CIRCUIT BREAKER WITH ROTARY OPERATING HANDLE.	SCHNEIDER/ SIEMENS/ L&T/ ABB/ POLYCAB
TRANSFORMER / COMPACT SUBSTATION	ABB/ SCHNEIDER/ KRILOSKAR/ CROMPTON
DIGITAL METERS	EL MEASURE / L&T/ CONSERVE/ TRINITY / NEPTUNE DUCATI
CONTACTORS, TIMERS	SCHNEIDER/ ABB/ L & T/ LEGRAND/ SIEMENS
CAPACITORS / CAPACITOR WITH RELAY	SCHNEIDER/ EPCOS/ L & T
VOLTMETER & AMMETER	CONZERVE/ ENERSOL/ HPL
SWITCH GEAR	SCHNEIDER/ SIEMENS/ L&T/ ABB/ CROMPTON
SELECTOR SWITCH	KAYCEE/ L & T
CURRENT TRANSFORMER	MATRIX/AE/ C&S / G&M

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

INDICATING LAMP	L & T/ SIEMENS/ AE
PROTECTIVE RELAYS	ABB/ L & T /SIEMENS/SCHNEIDER / GE
MULTI FUNCTIONAL METER	L&T/ LEGREND/ CONZERV
APFC RELAY (MICROPROCESSOR BASED)	SYNTRON/ ENERCON/ L & T/ DUCATI/ SCHNEIDER
BATTERIES	EXIDE/AMAR RAJA/OKAYA/LUMINOUS
BATTERY CHARGER	UPTRON/VOLTSTAT ELECTRONICS
L.T. / H.T. CABLE	POLYCAB/ HAVELLS/ FINOLEX/ KEI
DC MINIATURE CIRCUIT BREAKER	SCHNEIDER/SIEMENS/POLYCAB/ LEGRAND
CABLE LUG (TINNED COPPER)	DOWELLS/ MULTI/CAPITAL
CABLE GLAND	PEECO/ COMMET/ GRIPWELL/ POWER
MAIN L.T. PANEL, CAPACITOR PANEL & DISTRIBUTION PANEL	SPC ELECTROTECH/ TRICOLITE/ ADLEC/ APPLICATION CONTROL/ PRECISION
CABLE TRAY / RACEWAY	PILCO/CTM ENGINEERS/KME/SLOTCO/STEELWAYS
FIRE EXTINGUISHERS	ZENITH/MINIMAX/NEWAGE/ CEASE FIRE
ENERGY ANALYZER METER	CONZERVE/ELEMEASURE/ENERSOL
VOLTMETER & AMMETER	CONZERVE/ ELMEASURE/ ENERSOL
DISTRIBUTION BOARDS WITH MINIATURE CIRCUIT BREAKERS, RCCB	HAGER/LEGRAND/ POLYCAB/L & T/ HAVELLS
PVC INSULATED COPPER CONDUCTOR SINGLE CORE STRANDED WIRES OF 650/1100 VOLT GRADE	HAVELLS/FINOLEX /POLYCAB
TELEPHONE TAG BLOCK	KRONE/ TVS R&M
PVC CONDUIT	BEC/AKG/POLYCAB/ RMCON/ ASTRAL
M.S. CONDUIT	BEC/AKG / RMCON/ JINDAL
MODULAR SWITCHES & SOCKETS	LEGRAND/HAVELLS/POLYCAB/ ANCHOR
LV SYSTEM WIRE	SIEMENS/LEGRAND/ AMP/ HAVELLS/POLYCAB
TV/TELEPHONE OUTLET	SIEMENS/LEGRAND/ HAVELLS/POLYCAB
DATA OUTLET	SIEMENS/LEGRAND/ HAVELLS/POLYCAB
DATA RACK	SIEMENS/APW/LEGRAND/ WIPRO
LIGHT FIXTURE	PHILIPS/HAVELLS/POLYCAB/ WIPRO
LAMPS	PHILIPS/ HAVELLS/ POLYCAB/ WIPRO
CEILING FAN	ORIENT/HAVELLS/CROMPTON GREAVES/BAJAJ
EXHAUST FAN WITH LOUVERS	ORIENT/HAVELLS/CROMPTON GREAVES/BAJAJ
GEYSER	HAVELLS/ BAJAJ/V-GUARD/ A-O SMITH/ JAGUAR/ CROMPTON GREAVES
FIRE ALARM SYSTEM	NOTIFIER HONEYWELL/ SIEMENS/ TYCO/ EDWARDS/ AGNI

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

PRESENCE DETECTOR	HAGGER/LEGRAND/PHILIPS
RCC HUME PIPE FOR ELECTRICAL WORKS	ISI MARKED OF REPUTED COMPANY
PLC	SIEMENS/ALLEN BRADLEY
TELEPHONE / CO AXIAL WIRE	POLYCAB/FINOLEX/HAVELLS
PROFESSIONAL LED PANEL	PANASONIC/ SAMSUNG/SONY
PUBLIC ADDRESS SYSTEM	HONEYWELL/ BOSCH/TYCO/EDWARDS
D.G. SET (ENGINE)	CUMMINS/CATTERPILLAR/STAMFORD/KI RLOSKAR
D.G. SET (ALTERNATOR)	STAMFORD/ LERROYSOMMER/ CATTERPILLAR
D.G. ACCOUSTIC ENCLOSURE	JAKSON/STERLING/CATTERPILLER/SUDHIR
H.T. PANEL	ABB/ SCHNEIDER/SIEMENS
H.T. TERMINATION KIT	RAYCHEM/DENSON
SMOKE DETECTORS	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
HEAT DETECTORS	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
MANUAL CALL BOX	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
HOOTER/ SOUNDER	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
RESPONSE INDICATOR	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
FIRE PANEL	NOTIFIER HONEYWELL/ TYCO/ SIEMENS CERBERUS-PRO/SHRACK
PA AMPLIFIER	HONEYWELL/ BOSCH/HEINRICH/ATIES
PA SPEAKERS	HONEYWELL/ BOSCH/HEINRICH/ATIES
LINE MATCHING TRANSFORMER	HONEYWELL/ BOSCH/HEINRICH/ATIES
GOOSE NECK MIKE	HONEYWELL/ BOSCH/HEINRICH/ATIES
INVERTER	TOPAZ INTERNATIONAL/ LUMINOUS/HYTES/ SU- KAM/ MICROTECH
CAMERA WITH ALL ACCESSORIES	AXIS / INPULSE/ IDIS/ BOSCH/PELCO
ROAD BARRIER	NICE/ MAGNETICS/ GODREJ/ GE
CARD READER	SENSORMATIC-USA/ MOTOROLA/HONEYWELL(XLS- 3000)
MONITOR	LG/ SAMSUNG/SONY
MULTIPLEXER	SENSORMATIC OR EQUIVALENT
SEQUENCER	ALBA/ VANTAGE
PROXIMITY CARD	MOTOROLA/ HUGHES/HONEYWELL/GE/SIEMENS/HID
TELEPHONE TAG BLOCK	CTM ENGG/SYSTIMAX/SCHNEIDER/PANDUIT
TELEPHONE CABLES	DELTON / SKYTONE/ CLIPSAL/ HAVELLS
CO-AXIAL CABLES	FINOLEX/ HAVELLS/ POLYCAB

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

EPABX	ALKATEL/ SIEMENS/ NEC/ AVAYA/ PANASONIC
CCTV SYSTEM	AXIS / IMPULSE/ IDIS/ BOSCH/ HONEYWELL /TYCO
ACCESS CONTROL SYSTEM	HONEYWELL/ SIEMENS/SYRIS
NURSES CALL SYSTEM	AMTEK/RAULAND/AFCON/DAKSH
VIDEO CONFERENCE SYSTEM	POLYCOM/SONY/SYSCO
AUDIO PROCESSOR	BOSE/BSS/CLEARONE
BMS CONTROLLER/SOFTWARE CENTRAL CONTROL BMS SERVER	IBM/HP/DELL
BUILDING MANAGEMENT SYSTEM, BUILDING MANAGEMENT WEBS BASED SERVER SOFTWARE, PROGRAMMABLE & APPLICATION SPECIFIER CONTROLLER	SIEMENS/HONEYWELL EBI/TYCO / SCHNEIDER
SENSOR & FIELD DEVICES IMMERSION TYPE TEMPERATURE SENSORS, FLOW METER,ULTRA SONIC THERMAL ENERGY METER , OUTSIDE T+RH SENSOR	SIEMENS/KELE/SAUITER RACE
WATER LEVEL SWITCHES, FLAME PROOF LEVEL SWITCHES	KELE/ VESKLER/FLIPRO
DC VOLTAGE TRANSDUCER, CURRENT RELAY	KELE/SITU/OMICRON
ROOM TYPE TEMP. SENSOR, CO2 SENSOR, AMBIENT TEMP. SENSOR	SIEMENS/KELE/TRANE
CO SENSOR	DWYER/KALE/MSR GERMAN
PRESSURE TRANSMITTER	SIEMENS/TRANE/OMICRON
DIFFERENTIAL PRESSURE SENSOR	SIEMENS/TRANE/VESKLER
FIRE SUPPRESSION SYSTEM	SIEMENS/KIDDE/TYCO
HIGH MAST AND POLES	BAJAJ ELECTRICALS / MY FAIR LIGHT/ PARUTHI ENGINEERING
SERVICE/ PASSENGER ELEVATORS	KONE/SCHINDLER/OTIS
CHILLER PLANT	DAIKIN/CARRIER/BLUESTAR/KIRLOSKAR
OT EQUIPMENTS	ALTOS/ INDO SURGICALS/ MDD, India /METAFLIX/ LM MEDICAL DIVISION/COGNATE
BUTTERFLY VALVE	EMERSON (KEYSTONE/FISHER)/ L&T/KITZ CORPORATION/ ADVANCE VALVES /AIRA
BALANCING VALVE	EMERSON (KEYSTONE/FISHER)/ L&T/KITZ CORPORATION/ ADVANCE VALVES /AIRA
PRESURE AND TEMPERATURE GUAGE	PIONEER/H GURU/ EXCEL INSTRUMENTS/- BAUMER
WATER PUMPS	GRUNDFOSS/ WILO /ARMSTRONG/

**PHE WORKS**

S.NO.	ITEM	MANUFACTURERS NAME
1.	VITREOUS CHINA AND FIRECLAY SANITARYWARE WITH COVER	JAQUAR/HINDWARE/PARRYWARE/ROCA / KOHLER / CERA
3.	STAINLESS STEEL SINKS	JAYNA/ PARRYWARE/ NEELKANTH/NIRALI/ CERA
4.	C.P. FITTINGS & ACCESSORIES	JAQUAR/HINDWARE/PARKO/ROCA/ CERA
5.	C.P. WASTE, SPREADERS, URINAL FLUSH PIPES	JAQUAR/ HINDWARE/ PARRYWARE/ROCA / CERA
6.	SS COCKROACH TRAPS, GRATINGS FOR FLOOR DRAINS, FLOOR TRAPS AND RAIN WATER GRATINGS	CHILLY/ JAYNA/ CAMRY
7.	SOIL, WASTE & FITTINGS (a) CENTRIFUGALLY CAST SPUN CAST IRON PIPES (IS:3989)	SKF/ NECO/BIC/ PRINCE/ SUPREME/ KISSAN
8.	RCC PIPES	PRAGATI / JAIN SPUN/ ISI MARKS OF REPUTED COMPANY
9.	PVC/ CPVC PIPES & FITTINGS	ASTRAL/ ASHIRVAD /PRINCE/ FINOLEX /PRAKASH/ SUPREME
10.	HAND DRIER	JAQUAR/ HINDWARE/EURONICS
11.	BALL VALVES	ZOLOTO/ LEADER/ AIP/ SANT / NEU-G
12.	RAIN WATER PIPES & FITTINGS UPVC PIPES AND FITTINGS	PRINCE/ SUPREME/ PRAKASH/ FINOLEX/ ORI-PLAST
13.	WAFER TYPE BUTTERFLY VALVES	ZOLOTO/ LEADER/ AIP/ DANFOSS/ SANT / NEU-G
14.	WAFER TYPE NON-RETURN VALVES	ZOLOTO/ LEADER/ AIP/ DANFOSS SANT / NEU-G
15.	WATER METRES	CAPSTAN/KRANTI/KAYCEE/AQUAM ET
16.	BALL COCKS	GPA/ DRP/ SANT/ L & K
17.	STONEWARE PIPES & GULLY TRAPS	PERFECT/ BURN/ RK/ SAURAKHI / MOU
18.	C.I. MANHOLES COVERS AND FRAMES	NECO/ RIF/ BIC/SKF/BIC/ RPMF
19.	RCC MANHOLE COVERS & FRAMES	KK/ PRAKASH/ JSP

20.	FASTNERS	HILTI/INTELLOTEC / TRUCTEK / FISHER
21.	WATER HEATER	HAVELLS/ BAJAJ/ CROMPTON GREAVES
22.	HOT WATER NEOPRENE INSULATION	KAIFLEX
23.	GATE/ FULLLL WAY VALVES AND GLOBE VALVES	LEADER/ZOLOTO/SANT
24.	AIR RELEASE VALVES	SANT/ LEADER/DANFOSS/ ZOLOTO
25.	PIPECOAT	IWL LIMITED/ PYPKOTE
26.	C. I. PIPE	RIF, NECO, SKF, HEPCO, BIC
27.	G. I. PIPE	JINDAL, TATA, SWASTIK, APL APOLLO, SURYA PRAKASH
28.	G.I. FITTINGS (MALLEABLE CAST IRON)	JINDAL / SURYA PRAKASH /DRP-M/ ZOLOTO-M/ UNIK
29.	M.S. FITTINGS (FORGED)	DRP/ VS
30.	OVERHEAD WATER TANK	SINTEX, SHEETAL, EUREWELL
31.	WATER COOLER	BLUE STAR/VOLTAS/GODREJ
32.	R.O WATER PURIFIER	KENT/EUREKA FORBES/ ION EXCHANGE
33.	WATER TREATMENT PLANT	ION EXCHANGE/ THERMAX/ BRISANZIA
34.	HDPE PIPE	PRINCE/ SUPREME/ PRAKASH/ FINOLEX/ DUROLINE
35.	DI PIPE	JINDAL/ PRINCE/ SUPREME/ PRAKASH/ FINOLEX/ JAI BALAJI
36.	DI PIPE FITTINGS	JINDAL/ PRINCE/ SUPREME/ PRAKASH/ FINOLEX/ JAI BALAJI
37.	CP BRASS ANGLE VALVE	JAQUAR/CERA/GROHE/KOHLAR

**NOTE:** Above list of makes is the General List of makes for various items used in the works. However, contractor will select the makes from above list in accordance with the scope of works mentioned for this work and other makes may be ignored. Some makes of material also mentioned in Bill of quantity and tender drawings/images. In case of any discrepancy between makes of material mentioned in Bill of quantity & tender drawings/images AND above “List of Make” then make of material mentioned in Bill of quantity & tender drawings/drawing approved by engineer in charge will prevail.

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

**VOLUME II**  
**FINANCIAL BID**

**LETTER OF TRANSMITTAL FOR FINANCIAL BID**

To

**Deputy Chief Engineer  
C&C Division  
WAPCOS Limited  
76-C, Institutional Area, Sector - 18  
Gurugram-122015, Haryana  
Email: [ccm@wapcos.co.in](mailto:ccm@wapcos.co.in)**

Subject: Financial Bid for the work of “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”.

Sir,

With reference to your NIT document dated ....., 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. I / We acknowledge that the WAPCOS will be relying on the information provided in the BID and the documents accompanying the BID 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.
2. The BID Price has been quoted by me / us after taking into consideration all the terms and conditions stated in the NIT, draft Agreement, 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.
3. 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.
4. In the event of my/ our being declared as the Selected Bidder, I/we agree to enter into an Agreement in accordance with the draft that has been provided to me/us prior to the BID Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
5. I / We shall keep this offer as specified in the NIT.
6. I / We hereby submit our BID and offer a BID Price for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

Yours faithfully,

Date:  
signatory)

(Signature, name and designation of the Authorized

Place: **Name and seal of Bidder**

**SUMMARY OF COST**

**Name of Work:** “Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)”

<b>S No.</b>	<b>Particulars</b>	<b>Percentage Quoted Excluding GST</b>	
		<b>Percentage Quoted (below/above/at par)</b>	<b>Total Amount as per % Quoted</b>
<b>A</b>	Special Repair Works of Civil and Electro-mechanical Modalities at ESIS Hospital, Margao, Goa, (Package-03)	<i>Do Not fill percentage here</i>	<i>Do not fill cost here</i>
	<b>Total (A) (Excluding GST)</b> <i>(Do not fill cost here as it is Technical Proposal File)</i>		

**Note:-**

- Total amount quoted should be exclusive of GST.
- The rate quoted in Bill of Quantities, included all costs associated with the project including any out of pocket / mobilization expenses, indirect Taxes if any applicable as per Govt. terms, to be paid by the Contractor
- The tenderer shall quote rates up to zero decimal and as well as in words. In case of any discrepancy, the lowest rate quoted shall prevail.
- Demolition if occur any, it will be the property of ESIS GOA/WAPCOS. Contractor cannot claimed for the same.
- All materials, equipment's etc. shall be provided by the contractor only and disposal of the same at designated place shall come under the scope of contractor. No extra payment claim will be paid to the contractor for the same.
- Contractor has to comply all the regulation as per circulated by the State Government or Central Government or ESIS GOA or WAPCOS regarding construction, environment, pollution, Covid-19 guidelines etc. No extra payment claim will be given to the contractor for the same.
- The payment will be done based upon the actual quantity of work done at site certified by site in charge, within the quantity mentioned in BOQ.

- The Contractor should follow all the prevailing statutory regulations with respect to safety, labour welfare, insurances etc. without any additional burden to WAPCOS and ESIS GOA.
- **The summary of cost only be filled separately in attached excel BOQ**

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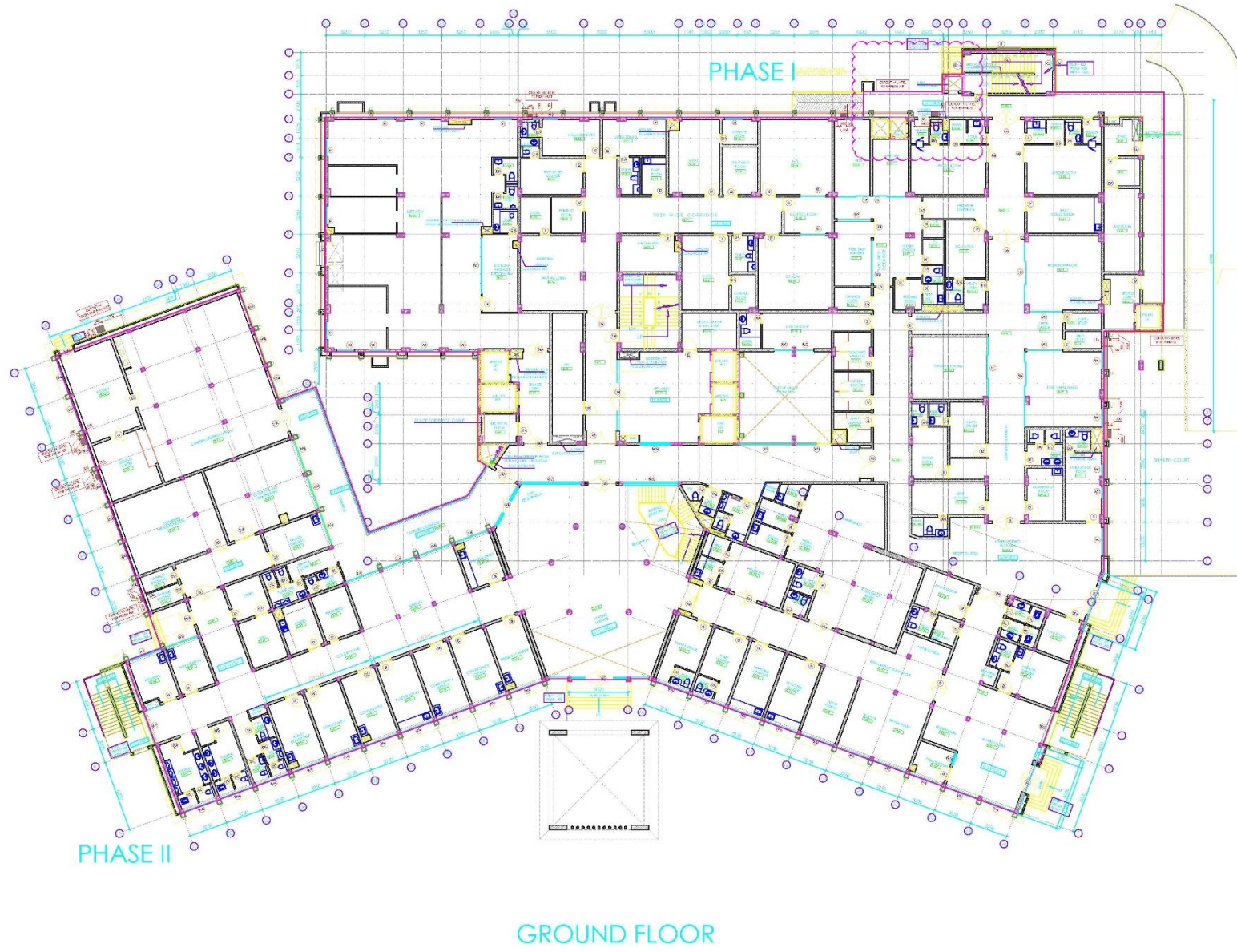
**Signature of the authorized representative :**  
**Name of the agency :**  
**Name and designation :**  
**Contact Details a) Communication address:**  
**b) E-mail id :**  
**c) Contact Nos. :**

Date:

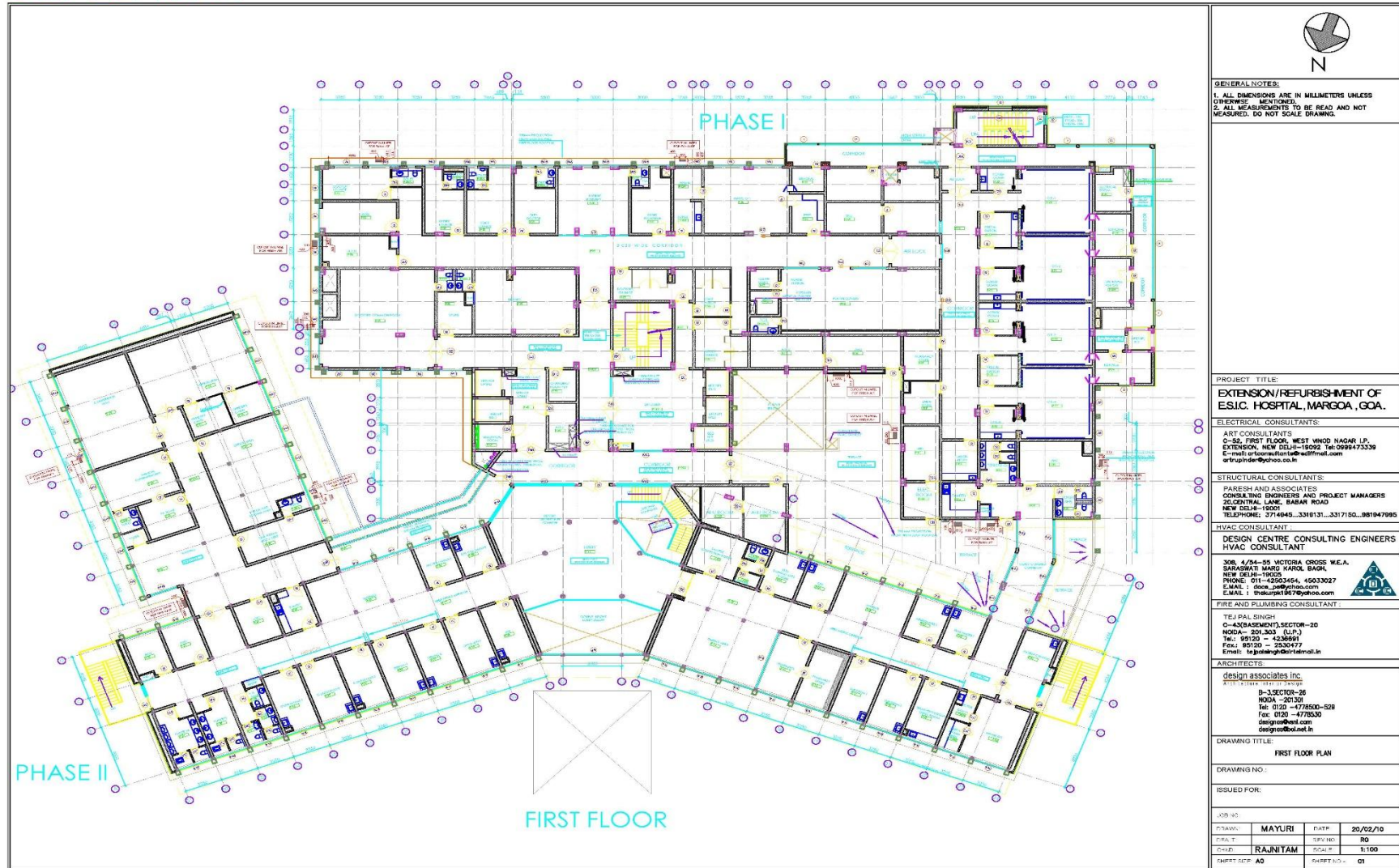
Place:

**SECTION-X  
DRAWINGS**





SHEET SIZE-A0,  
SCALE-1:100



GENERAL NOTES:  
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED.  
2. ALL MEASUREMENTS TO BE READ AND NOT MEASURED. DO NOT SCALE DRAWING.

PROJECT TITLE:  
**EXTENSION/REFURBISHMENT OF  
E.S.I.C. HOSPITAL, MARGOA, GOA.**

ELECTRICAL CONSULTANTS:  
ART CONSULTANTS  
C-52, FIRST FLOOR, WEST VINOD NAGAR LP,  
EXTENSION, NEW DELHI-110092 Tel: 0999473339  
E-mail: art.consultants@rediffmail.com  
artupinder@yahoo.co.in

STRUCTURAL CONSULTANTS:  
PARESH AND ASSOCIATES  
CONSULTING ENGINEERS AND PROJECT MANAGERS  
20,CENTRAL LANE, BARAR ROAD  
NEW DELHI-110027  
TELEPHONE: 3714045...3316131...3317150...881047095

HVAC CONSULTANT:  
DESIGN CENTRE CONSULTING ENGINEERS  
HVAC CONSULTANT

308, 4/24-05 VICTORIA CROSS W.E.A.  
SARASWATI MANG KAROL BAGH,  
NEW DELHI-110028  
PHONE: 011-42503454, 45033027  
E-MAIL: dccc\_poo@yahoo.com  
E-MAIL: thekunal187@yahoo.com



FIRE AND PLUMBING CONSULTANT:  
TEJ PAL SINGH  
C-43(AMBASMENT) SECTOR-20  
RODA- 201-303 (U.P.)  
Tel: 99720 - 4236991  
Fax: 89120 - 4236977  
Email: tejpalsingh@rediffmail.in

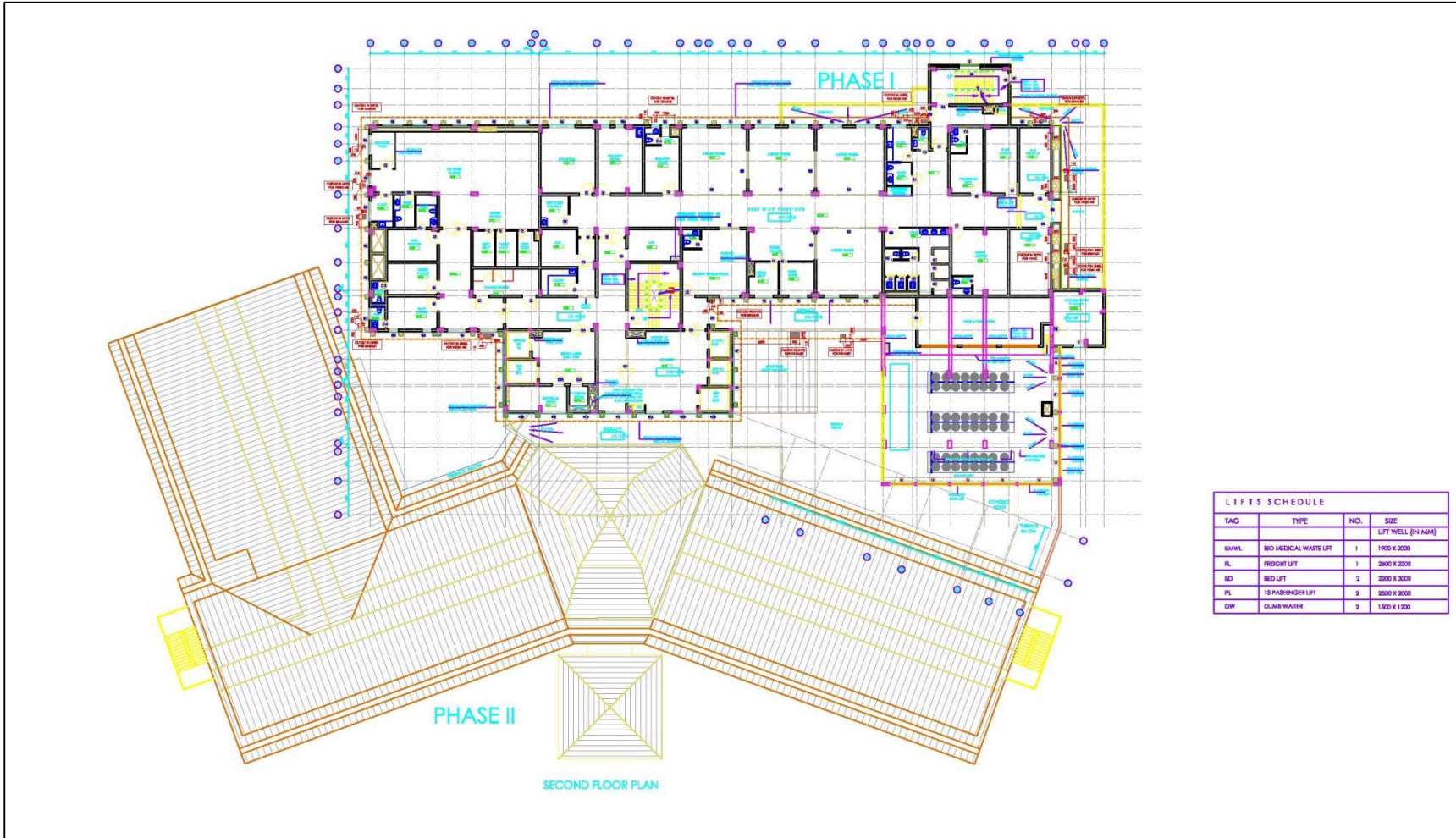
ARCHITECTS:  
design associates inc.  
C-101, SECTOR-10, GATEWAY GREEN  
B-3, SECTOR-26  
RODA - 201/303  
Tel: 0120 - 4778530-528  
Fax: 0120 - 4778530  
designassociates.com  
designassociates.net.in

DRAWING TITLE:  
FIRST FLOOR PLAN

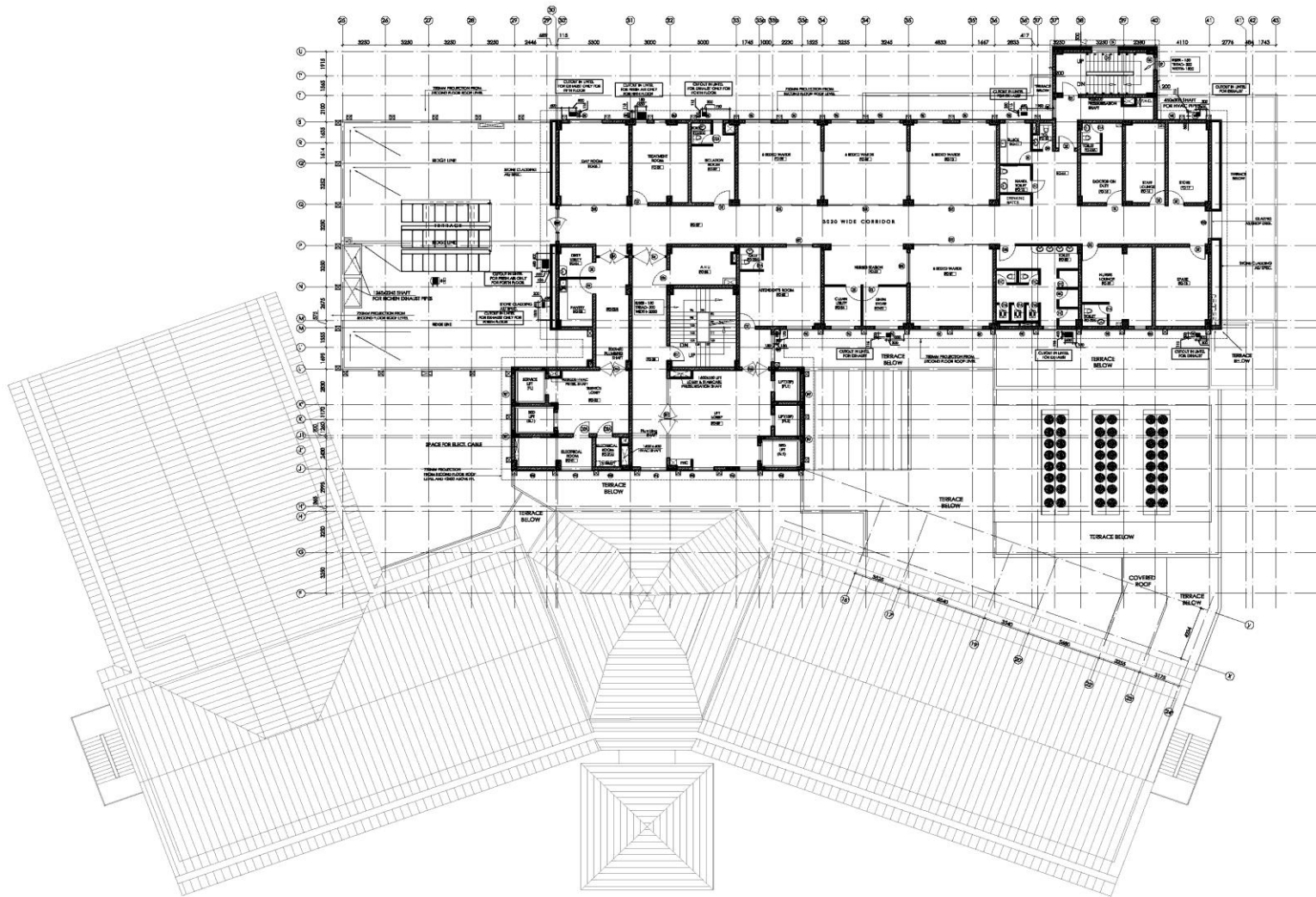
DRAWING NO.:

ISSUED FOR:

DATE	20/02/19
BY	MAYURI
CHKD BY	RAJNITAM
SCALE	1:100
SHEET NO.	01



LIFTS SCHEDULE			
TAG	TYPE	NO.	SIZE
			LIFT WELL (IN MM)
BMWL	BIO MEDICAL WASTE LIFT	1	1900 X 2000
FL	FREIGHT LIFT	1	2400 X 2000
BD	BED LIFT	2	2200 X 2000
PL	15 PASSENGER LIFT	3	2500 X 2000
DW	DUMB WAITER	2	1500 X 1300



FOURTH AND FIFTH FLOOR

LVL. +115.6 & +119.35

**VOLUME-II**  
**FINANCIAL BID**  
**SUMMARY OF COST**  
**BILL OF QUANTITIES (BOQ)**

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

<b>SPECIAL REPAIR (CIVIL &amp; ELECTRICAL) WORKS OF ESIS HOSPITAL MARGAO IN GOA- SUBMISSION OF DETAILED ESTIMATE- SUBMISSION OF DETAILED ESTIMATE FOR APPROVAL-REG.</b>			
<b>ABSTRACT OF COST</b>			
<b>S.No.</b>	<b>Description</b>	<b>Amount( Rs.) incl GST</b>	<b>Amount( Rs.) Excl GST</b>
<b>1</b>	CIVIL WORK PART (DSR + NDSR)	10,10,72,947.34	8,56,55,040.12
<b>2</b>	ELECTRICAL WORK PART	8,91,84,270	7,55,79,890
	<b>TOTAL AMOUNT</b>		<b>16,12,34,929.66</b>
<b>3</b>	BUY BACK AND CREDIT OF DISMANTLE & UNSERVICEABLE ITEMS	-20,18,800	-17,10,847
	<b>TOTAL</b>	<b>19,02,57,217.00</b>	<b>15,95,24,082.20</b>

<b>SPECIAL REPAIR (CIVIL &amp; ELECTRICAL) WORKS OF ESIS HOSPITAL MARGAO IN GOA- SUBMISSION OF DETAILED ESTIMATE- SUBMISSION OF DETAILED ESTIMATE FOR APPROVAL-REG.</b>						
<b><u>ESIS HOSPITAL MADGAON</u></b>						
<b><u>CIVIL WORK</u></b>						
<b>S.No.</b>	<b>DSR 2023</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
<b>DISMANTLING &amp; DEMOLISHING WORK</b>						
1	15.2.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	91.35	Cum	1503.60	137353.86
2	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	9.72	Cum	3551.25	34518.15
3	15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	341.28	Kg	9.05	3088.58
4	15.12.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :Of area beyond 3 sq. metres	150.00	Each	502.75	75412.50
5	15.14.2	Dismantling wood work in frames, trusses, purlins and rafters up to 10 etres span and 5 metres height including stacking the material within 50 metres lead :Of sectional area below 40 square centimetres	780.00	Mtr	17.85	13923.00
6	15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	1000.00	Kg	5.65	5650.00

**NIT No.: WAP/C&C/ESIS GOA/SR/PKG-3/2026/03**

7	15.23.2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles above 25 mm and up to 40 mm	2736.00	Sqm	113.35	310125.60
8	15.28.1	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. Sheet	50.00	Sqm	164.95	8247.50
9	15.44.2	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge : 15 mm to 40 mm nominal bore	500.00	Mtr	149.80	74900.00
10	15.52	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	20.00	each	112.05	2241.00
11	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	1528.80	Sqm	54.65	83548.92
12	15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	15212.20	Sqm	56.35	857207.47
13	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	2500.00	Cum	263.95	659875.00
<b>NEW WORK</b>						
<b>EXCAVATION WORK</b>						

14	2.9	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.	1514.25	Cum	632.95	958444.54
		<b>FILLING IN FOUNDATION</b>				
15	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	1211.40	Cum	196.00	237434.40
		<b>SURFACE DRESSING</b>				
16	2.28.1	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. All kinds of soil	7500.00	Sqm	34.15	256125.00
		<b>SOIL TREATMENT</b>				
17	2.35.3.1	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor:	1500.00	Sqm	310.05	465075.00
		<b>P.C.C</b>				
18	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	325.00	Cum	7878.50	2560512.50
		<b>STEEL FOR BEAM RUSTING AREA</b>				

19	5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars	341.28	kg	107.85	36807.05
		<b>EXPOSED SURFACE TREATMENT</b>				
20	5.23	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement: 3 fine sand).	10.80	Sqm	300.45	3244.86
		<b>BRICK WORK</b>				
21	6.34.2	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 :				
		Cement mortar 1:6 (1 cement : 6 coarse sand)	44.75	Cum	8752.55	391706.37
		<b>GRANITE WORK</b>				
22	8.2.2.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels. Granite stone slab of colour black, Cherry/Ruby red	602.80	Sqm	5413.50	3263257.80
		<b>FOR WASHBASIN COUNTER GRANITE EDGE</b>				
23	8.3.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design	320.00	Rm	510.95	163504.00

		approved by Engineer-in-Charge. Granite work				
		<b>OPENING FOR WASHBASIN</b>				
24	8.5	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	32.00	Each	978.70	31318.40
		<b>GRANITE POLISHING</b>				
25	8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	672.00	Sqm	506.70	340502.40
		<b>FLUSH DOOR</b>				
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.				
	9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	315.00	Sqm	3473.85	1094262.75
27	9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	315.00	Sqm	462.35	145640.25
28	9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	315.00	Sqm	106.70	33610.50
29	9.14	Extra for providing ISI marked Stainless Steel butt hinges instead of M.S. pressed butt hinges bright finished of required size with necessary screws. (Shutter area to be measured).	315.00	Sqm	193.55	60968.25
		<b>CHOWKHAT</b>				

30	9.1.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Second class teak wood	4.30	Cum	142949.70	615130.43
		<b>PARTICLE BOARD</b>				
31	9.6.2	12 mm thick pre-laminated particle board (decorative lamination on both sides) grade -1, medium density flat pressed, three layer particle board FPT-   or graded wood particle board FPT-  , conforming to IS : 3087, bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823, Grade 1, Type - II marked.	870.00	Sqm	3212.70	2795049.00
		<b>CUP BOARD</b>				
32	9.16.1.2	Providing and fixing 25 mm thick shutters for cup board etc. : Panelled or panelled & glazed shutters Second class teak wood including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws :	627.00	Sqm	4542.90	2848398.30
		<b>PVC DOOR FRAME</b>				
33	9.119	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer- in-Charge.	255.00	Rm	492.70	125638.50
		<b>PVC DOOR SHUTTER</b>				

34	9.120.2	<p>Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top &amp; bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2 ) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail &amp; bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles &amp; rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification &amp; drawing. 30 mm thick pre laminated PVC door shutters</p>	94.50	Sqm	3663.80	346229.10
		<b>DOOR LOCK</b>				

35	9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	150.00	Nos.	868.95	130342.50
		<b>DOOR STOPPER</b>				
36	9.101.1	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Single rubber stopper	150.00	Nos.	39.60	5940.00
37	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	150.00	Nos.	1124.85	168727.50
		<b>TRUSS WORK</b>				
38	10.16.2	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. complete. Hot finished seamless type tubes	3800.00	Kg	206.35	784130.00
		<b>WELDING WORK</b>				
39	10.22	Welding by gas or electric plant including transportation of plant at site etc. complete.	10000.00	cm	3.70	37000.00
		<b>FLOORING</b>				
40	11.3.1	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 steps etc. complete. 40 mm thick	1500.00	Sqm	614.20	921300.00

		with 20 mm nominal size stone aggregate				
41	11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) 25 mm thick :	2015.00	Sqm	1948.25	3925723.75
42	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	20.32	Sqm	2354.70	47838.09
43	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.	600.00	Sqm	1096.55	657930.00
44	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,	2340.00	Sqm	1267.95	2967003.00

		including pointing in white cement mixed with pigment of matching shade complete.				
45	11.48.2	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge. Size of Tile 600x600 mm	2615.00	Sqm	309.05	808165.75
		<b>ROOF SHEET</b>				
46	12.1.1	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to 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. 1.00 mm thick with zinc coating not less than 275 gm/m?	200.00	Sqm	1457.15	291430.00
		<b>FALSE CEILING</b>				
47	12.54.2	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with the help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier				

		<p>bracket at 1000 mm c'/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with the help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with :</p>				
		<p>GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G   sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.</p>	15659.00	Sqm	2221.70	34789600.30
		<b>PLASTER &amp; FINISHING</b>				
		<b>INTERNAL PLASTER</b>				
48	13.1.2	<p>12 mm cement plaster of mix :1:6 (1 cement: 6 fine sand)</p>	1528.80	Sqm	333.35	509625.48
		<b>PUTTY</b>				
49	13.80	<p>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..</p>	1932.80	Sqm	156.05	301613.44
		<b>PAINT</b>				
50	13.41.1	<p>Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water tinnable priming coat with cement primer</p>	1932.80	Sqm	185.65	358824.32
		<b>DOOR/WINDOWS FOR EXISTING OPENING</b>				

51	14.1	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.Door chowkhats				
	14.2.1	Door chowkhats	20.00	each	1782.55	35651.00
	14.2.2	Window chowkhats	15.00	each	1125.15	16877.25
		<b>SCAFFOLDING</b>				
52	14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineerin-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once	2000.00	Sqm	338.25	676500.00

		irrespective of duration of scaffolding.				
		<b>FOR PARK AREA( RESIDENTIAL BLOCK</b>				
53	16.68	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	1100.00	Sqm	972.00	1069200.00
54	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	27.00	Cum	10117.60	273175.20
55	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per	100.50	Cum	2914.30	292887.15

		specifications and directions of Engineer-in-Charge.				
56	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 :				
	4.1.3	1:2:4 (1 cement : 2 coarse sand(zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	16.00	Cum	7878.50	126056.00
		<b>WC</b>				
57	17.1.2	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:Stainless Steel AISI-304(18/8) Orissa pattern W.C. pan of size 585x480 mm with flush pipe and integrated type foot rests	12.00	Each	11390.95	136691.40
58	17.2.2	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 :W.C. pan with ISI marked black solid plastic seat and lid	12.00	Each	6383.25	76599.00
59	17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting,	12.00	Each	14999.15	179989.80

		of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.				
60	17.7A	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:-(a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	20.00	Each	3960.55	79211.00
61	17.60.1.1	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :100 mm inlet and 100 mm outlet	20.00	Each	1996.50	39930.00
		<b>URINAL</b>				
62	17.4.4	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 :Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern	12.00	Each	18579.95	222959.40
		<b>LABORATORY SINK</b>				
63	17.11.2	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40 mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and	10.00	Each	6585.80	65858.00

		making good the wall wherever required :Size 600x450x200 mm				
		<b>JET</b>				
64	17.16A	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	12.00	Each	349.15	4189.80
		<b>MIRROR</b>				
65	17.32.4	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 :Rectangular shape 1500x450 mm	6.00	Each	2093.00	12558.00
		<b>CLAMPS</b>				
66	17.37.1	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :For 100 mm dia pipe	20.00	Each	362.85	7257.00
		<b>BEND</b>				
67	17.39.1.1	Providing and fixing plain bend of required degree.100 mm dia Sand cast iron S&S as per IS - 1729	15.00	Each	470.45	7056.75
68	17.41.1.1	Providing and fixing double equal junction of required degree with access ndoor, insertion rubber washer 3 mm thick, bolts and nuts complete :100x100x100x100 mm	15.00	Each	1138.65	17079.75
		<b>HOLE ON BRICK WORK FOR PLUMBING</b>				
69	17.61.1	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4	10.00	Each	713.20	7132.00

		(1 cement : 4 coarse sand) :100 mm dia				
		<b>BOTTLE TRAP</b>				
70	17.70.2	Providing and fixing PTMT Bottle Trap for Wash basin and sink. Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	10.00	Each	375.65	3756.50
		<b>SOAP DISH</b>				
71	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	10.00	Each	168.35	1683.50
		<b>PLUMBING PIPE</b>				
72	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and 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.				
	18.7.2	20 mm nominal dia Pipes	800.00	Mtr	537.60	430080.00
	18.7.3	25 mm nominal dia Pipes	100.00	Mtr	627.25	62725.00
	18.9.8	80 mm nominal dia Pipes	270.00	Rm	2166.35	584914.50
		<b>BIB COCK</b>				
73	18.51.1	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.15 mm nominal bore	10.00	each	798.95	7989.50
		<b>STOP COCK</b>				

74	18.52.1	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.15 mm nominal bore	10.00	each	670.45	6704.50
		<b>ANGLE COCK</b>				
75	18.53.1	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:893115 mm nominal bore	10.00	each	574.30	5743.00
		<b>WASTE PIPE</b>				
76	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	17.28.2	Flexible pipe				
	17.28.2.2	40 mm dia	12.00	Nos.	119.55	1434.60
		<b>ALUMINIUM WORK</b>				
77	21.1.1.1	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 / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For fixed portion Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	93.60	Kg	495.05	46336.68

78	21.1.2.1	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)Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	6.30	Kg	598.60	3771.18
		<b>DOOR SPRING</b>				
79	21.4.1	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	10.00	Nos	2823.85	28238.50
		<b>GAP FILLING</b>				
80	21.8.1	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. Upto 5 mm depth and 5 mm width	15.60	Rm	96.75	1509.30
		<b>HANDLE</b>				
81	21.12.3	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge. Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar	10.00	Nos	645.50	6455.00

		<b>DOOR LOCK</b>				
82	21.13	Providing and fixing Brass 100 mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	10.00	Nos	528.85	5288.50
		<b>WATER PROOFING</b>				
83	14.86	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	2000.00	Sqm	730.55	1461100.00

84	25.2	<p>Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including: (a) Structural analysis &amp; design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation &amp; drainage and protection against fire hazard including: (b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.</p>				
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	<p>(c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment, including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass. (d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight. (e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&amp;P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified.</p>	600.00	Sqm	3510.50	2106300.00
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85	13.116	<p>Polishing in high gloss/matt finish melamine clear polish on wood work in required color/wooden shade texture with following process in the sequence as detailed below: 1. The surface to be polished is rubbed with sand paper 80/120 no. and then with sand paper of 160/180 nos. 2. Applying two coats of sealer with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs. 3. On drying of sealer coat, wet rubbing with emery cloth of finer grading with ample water to remove excess sealer layer and make the surface further smooth after this wet rubbing, then surface is applied with special grade melamine fillers to fill all the small and big holes/grooves etc. Filler coat to be allowed to dry for 4 to 6 hrs on which again a light wet rubbing is done this surface is further allowed to dry for 12 hrs. 4. On this, 1st coat of melamine polish is applied with spray gun using melamine clear polish and melamine thinner in required proportion. This 1st coat is allowed to dry for 24 hrs then this dry surface is again fine wet rubbed smooth, which is further allowed to dry for 12 hrs. The final melamine polish is applied with compressor pressure spray gun using melamine clear polish and melamine thinner mixed in required proportion complete as per direction of Engineer-in-Charge. (Final coat to be done in 1 or 2 layers without gap of time.)</p>	400.00	Sqm	3049.85	1219940.00
		<b>TOILET WATERPROOFING WORK</b>				
86	22.5	<p>Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with</p>				

		water proofing cement compound consisting of applying :				
	a	First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.				
	b	Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.				
		The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	600.00	Sqm	617.05	370230.00
<b>HORTICULTURE WORK</b>						
87	2.33	Providing and laying Neelgiri/Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and than rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge.	1000.00	Sqm	214.40	214400.00
88	2.57.1	Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserveiceable material's as per direction of officer in charge (excluding cast of plant & water) Hedge Plant /Ground cover	20000.00	Each	7.30	146000.00
89	10024	Areca Palm having ht. 90 cm to 1.20 m with 4 to 5 suckers, well developed, fresh and healthy with lush green foliage in 25 cm size of Earthen pot / Plastic pot.	50.00	Nos	154.00	7700.00
<b>AGGREGATE FOR BASEMENT</b>						
90	16.3.3	Supplying and stacking at site.53 mm to 22.4 mm size stone aggregate	1211.40	Cum	1842.30	2231762.22

<b>SUMP TANK (4 Nos)</b>						
		<b>EARTH WORK</b>				
91	2.9	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.	82.00	Cum	632.95	51901.90
		<b>P.C.C</b>				
92	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	4.10	Cum	7878.50	32301.85
		<b>REINFORCED CEMENT CONCRETE</b>				
93	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.“(Note :- Cement content considered in this item is @ 330 kg/cum. “Excess/ less cement used as per design mix is payable/recoverable separately).				
	5.33.1	All works upto plinth level	242.31	Cum	9504.75	2303095.97

		<b>STEEL</b>				
94	5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars	37302.42	kg	107.85	4023065.46
		<b>CENTRING &amp; SHUTTRING</b>				
95	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
(a)	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	11.96	sqm	392.15	4690.11
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	73.84	sqm	961.30	70982.39
		<b>PLASTER &amp; FINISHING</b>				
96	13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	73.84	sqm	333.35	24614.56
<b>R.C.C BASE FOR CHILLER PLANT(10x10 Mtr)</b>						
97	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).				
	5.33.1	All works upto plinth level	25.38	Cum	9504.75	241230.56
98	5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth	3509.89	kg	107.85	378541.85

		level.Thermo-Mechanically Treated bars				
99	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
(a)	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	35.28	sqm	392.15	13835.05
(b)	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	108.90	Sqm	961.30	104685.57
100	13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	144.18	Sqm	333.35	48062.40
<b>PLINTH PROTECTION</b>						
101	4.17	Making plinth protection 50mm thick of cement concrete 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) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation leveling & dressing & finishing the top smooth.	276.00	Sqm	749.30	206806.80
					<b>Total</b>	<b>85548880.57</b>
		Modified Estimated cost using correction factor on existing items of the DSR-2023 @ 0.973				<b>83239060.79</b>
		COST INDEX rate on BOQ items as per cpwd office memoredum no-68/AD-TAS/CI/2024/282-Hindi dated 11/09/2024 add CI @14%.				<b>11653468.51</b>
		<b>TOTAL AMOUNT SCHEDULED (DSR) ITEMS</b>				<b>94892529.30</b>

<b>SPECIAL REPAIR (CIVIL &amp; ELECTRICAL) WORKS OF ESIS HOSPITAL MARGAO IN GOA- SUBMISSION OF DETAILED ESTIMATE- SUBMISSION OF DETAILED ESTIMATE FOR APPROVAL-REG.</b>						
<b>ESIS HOSPITAL MADGAON</b>						
<b>CIVIL WORK</b>						
<b>SL.No.</b>	<b>NDSR</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
<b>DISMANTLING &amp; DEMOLISHING WORK</b>						
1	NDSR	Cleaning of exposed brickwork by thoroughly scrubbing the surface to remove dirt, efflorescence (white mineral deposits), and other loose particles. Work to include application of a mild acid solution (e.g., dilute Hydrochloric acid) where necessary, followed by a thorough rinsing with water.	6000.00	Sqm	250.00	1500000.00
<b>CLEANING OF ACP SHEET</b>						
2	NDSR	Cleaning of structural glazing / facade work by using standard cleaning materials with the help of scaffolding/Jhoola etc.. Building is covered with structural glazing work which is consist of combination of both side glass and aluminium composite pannel.The chemical / cleaning materials should be of quality so that no damage / corrosion occurs to glass and aluminium composite pannel.Further, utmost care is to be taken so that no scratch either in glass or Aluminium panel occurs. The rate is inclusive of all types of safety measures, equipments / pparatus & PPEs etc as per direction Engineer Incharge.	6000.00	Sqm	150.00	900000.00
<b>SILICON FILLING</b>						
3	NDSR	Filling the gap in between aluminium composite panels (ACP Sheet)/Glass Cladding by providing weather silicon sealant of approved quality upto 5mm depth and 5 mm width etc. all complete as per the direction of Consulting Engineer / in-charge.	1200.00	Mtr	277.23	332676.00
<b>HAND SHOWER</b>						
4	NDSR	Providing a n d fixing CP Brass Hand shower with wall hook of approved make Hand Shower (Health Faucet) with 8mm	20.00	Nos.	1584.17	31683.40

		Dia, 1.2 Meter Long Flexible Tube & Wall Hook etc. all complete as per the direction of the Engineer-in-Charge				
<b>ANGLE VALVE</b>						
5	NDSR	Providing and fixing CP brass Angle valve of 15mm nominal bore. all complete as per the direction of the Engineer-in-Charge.	60.00	Nos	1188.12	71287.20
<b>DISSABLED TOILET</b>						
6	NDSR	Providing and fixing one set of accessories for toilet of differently abled persons made with stainless steel base, sleeved with contour finished nylon for grip having antibacterial surface with load bearing capacity of 150kgs comprising of 1 no of L shaped grab bar , 2 nos of U shaped grab bars and 1 no Set of U shaped hinge type grab bar all as per approved drawings and as per the direction of Engineer-in- Charge including the cost of necessary screws, nut,	5.00	Nos	17821.86	89109.30
<b>GRAB BAR</b>						
7	NDSR	Providing and fixing one number of 600 Mm long grab bar ( Horizontal pull bar) to toilet door of differently abled Persons made with stainless steel base, sleeved with contour finished nylon for grip having antibacterial surface as per Each rings and as per the direction of Engineer-in-Charge including the cost of necessary screws, nut, bolts etc,	5.00	Nos	891.14	4455.70
<b>WALL MIXER</b>						
8	NDSR	Providing and fixing Wall Mixer of approved quality and make as per the direction of Engineer-in-charge	7.00	Nos	891.14	6237.98
<b>SWR PIPE WITH FITTING</b>						
9	MR	Providing & fixing unplasticised Rigid PVC SWR pipes conforming to IS : 13592 Type B by cutting, removing, replacing including jointing with seal/rubber ring conforming to IS : 5382 and with solvent cement or rubber lubricant as the case may be.- Pipe of Dia 110 mm	250.00	Meter	831.87	207967.50
10	MR	Providing & fixing SWR Fittings confirming to IS:14735 including cutting,replacing,jointing with seal ring	30.00	Each	330.10	9903.00

		conforming to IS :5382 leaving 10 mm gap for thermal expansion.Plain Bend 110 mm dia				
11	MR	Providing & fixing SWR Fittings confirming to IS:14735 including cutting,replacing,jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion. Door Bend 110 mm dia	30.00	Each	400.73	12021.90
12	MR	Providing & fixing SWR Fittings confirming to IS:14735 including cutting,replacing,jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion. Tee with door 110 mm dia	16.00	Each	505.56	8088.96
13	MR	Providing & fixing SWR Fittings confirming to IS:14735 including cutting,replacing,jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion. Nahani Trapwith Jali-110 mm	30.00	Each	374.47	11234.10
<b>VINYLE FLOORING</b>						
14	NDSR	Providing and laying flooring with 1 mm thick vinyl flooring of approved make sq.ft QRO and sample in pattern as per instruction of Engineer in Charge	500.00	Sqm	2475.25	1237625.00
<b>VINYLE WALL SHEET COVER</b>						
15	NDSR	WALL VINYL GRAPHIC - TYPE -1: (Bamboo Strip Pattern 300 - 450mm wide) (Emergency /Chemo / General ward):Wall Vinyl of pattern uniformly as per manufacturers specifications, on wall surface / gypboard partitions / Gyp paneling. cost includes surface preparation, primer coats, levelling patti Colours as per architect's detail. Cost to include preparation on the punned surface for receiving the wall paper as per the manufacturer specification. NOTE : Interior Contractor must develop all the necessary Vinyl Graphics in required resolution using the Graphics Vendor. The Graphics should be matching in line with the Concept Presentation using Presets from the Vendor / Custom developed subject to Approval by Client / Architect.	800.00	Sqm	1584.16	1267328.00

<b>PERFORATED PIPE FOR BASEMENT</b>						
16	NDSR	Supplying and laying 75mm (3") dia UPVC Perforated Pipe in trenches, including jointing, Bend ,Elbow all fitting and alignment etc complete.	450.00	Rm	400.00	180000.00
<b>CHIKEN MESH WIRE FOR CRACK ON R.C.C MEMBER</b>						
17	NDSR	Providing and fixing 150mm wide G.I. Chicken Mesh (24 gauge) at the junction of RCC and masonry, including nails and labor	180.00	Sqm	150.00	27000.00
<b>FRP GRATING</b>						
18	NDSR	Supply, delivery, and installation of 38 mm thick FRP moulded grating with 38 × 38 mm mesh size, manufactured using Isophthalic polyester resin system, complete with anti-skid gritted surface finish and UV-resistant properties. Installation shall include all necessary supports, fasteners, clamps, cutting, fitting, and finishing as required to complete as per direction of Engineer In Charge	94.60	Sqm	3000.00	283800.00
					Total(A)	6180418.04
			Total including GST(A)			6180418.04

<b>SPECIAL REPAIR (CIVIL &amp; ELECTRICAL) WORKS OF ESIS HOSPITAL MARGAO IN GOA- SUBMISSION OF DETAILED ESTIMATE- SUBMISSION OF DETAILED ESTIMATE FOR APPROVAL-REG.</b>						
<b>ELECTRICAL WORK</b>						
<b>SUB HEAD-1 ELECTRICAL INSTALLATION</b>						
<b>Sr. No.</b>	<b>DSR 2025/N DSR</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
		<b>WIRINGS, LIGHT &amp; SWITCHES</b>				
1	8.9.5	LED Batten light (System lumen efficacy $\geq 105$ <120 lm/Watt) :- Supplying, installation, Testing & Commissioning of LED surface mounted Batten light (CRCA Sheet Body (Thickness $\geq 0.50$ mm) 18- 22 watt	100	Each	629.00	62900.00
2	8.7.10	Supplying, installation, Testing & Commissioning of Panel light 2X2 FT/ 600x600 mm (CRCA Sheet Body (Thickness $\geq 0.50$ mm) 36Watt	270	Each	2225.00	600750.00
3	8.13	LED Street light fixture, powder coated pressure die cast aluminium body (System lumen efficacy $\geq 120$ <135 lm/Watt) Supplying, installation, Testing & Commissioning of Street light LED fixture powder coated pressure die cast aluminium body with driver as per the requirement with Driver efficiency >85%, Input voltage: 140-270 Volt AC, frequency 50/60 hz, Operating temp range -5 0C to 50 0C, internal surge protection of 5 KV L,N,E as per IEC 61000-4-5, Driver efficiency >85%,THD < 10% as per IEC 61000-3-2, P. F. $\geq 0.95$ , IP-66,IK-10, CRI >70, under voltage and over voltage protection, EMIEMC As per CISPR 15 (For full specification, pls refer DSR)				
	8.13.19	200 watt	15	Each	5035.00	75525.00

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4	12.4	Erection of steel tubular or rail pole strut in cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and secured with holding clamps, bolts, nuts, etc. as required.	15	Each	10363.00	155445.00
5	1.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
	1.3.3	Group C	150	Points	2101.00	315150.00
6	1.7	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/recessed steel conduit as required.				
	1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	450	Metre	370.00	166500.00
	1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	400	Metre	414.00	165600.00
	1.7.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	350	Metre	476.00	166600.00
	1.7.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	200	Metre	652.00	130400.00
	1.7.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	320	Metre	778.00	248960.00
	1.7.7	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	200	Metre	621.00	124200.00
7	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				

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	1.21.2	25mm	250	Metre	168.00	42000.00
8	1.27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	75	Each	354.00	26550.00
	1.27.2	3 Module (100mmX75mm)	75	Each	384.00	28800.00
	1.27.3	4 Module (125mmX75mm)	75	Each	401.00	30075.00
	1.27.4	6 Module (200mmX75mm)	75	Each	462.00	34650.00
	1.27.5	8 Module (125mmX125mm)	75	Each	517.00	38775.00
	1.27.6	12 Module (200mmX150mm)	30	Each	614.00	18420.00
9	DSR 2025 (8.1)	Supplying, installation, Testing & Commissioning of LED Recessed/ surface Down lighter (Round/ square/ Rectangular) SMD type of following body material with PMMA and prismatic diffuser and construction as per IS : 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -15 deg to 40 deg centigrade, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD < 10% , P. F.≥0.95, IP20, CRI >80 (For full specification kindly refer mentioned DSR no.)				
	8.1.3	12-15 Watt	240	Each	715.00	171600.00
10	8.90	Supplying, Installation, Testing & Commissioning of LED surface mounted Batten light of following body material and construction as per IS : 10322 with driver (Replaceable) as per the requirement (kindly refer DSR for full specification)				
	8.9.1	18- 22 Watt	100	Each	681.00	68100.00
11	28.2.9	Supplying, installation, testing & commissioning of intelligent addressable thermal detector with rate of rise cum fixed temperature	150	Each	2866.00	429900.00

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		thermistor complete with base as required.				
12	27.21	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 C with required accessories :				
	27.21.1	Pendent Sprinkler	100	Each	599.00	59900.00
13	28.5.1	Supplying and laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated, with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) insulation and LSZH inner bedding, steel wire armouring, and LSZH outer sheath complete as required.	150.00	Met er	386.00	57900.00
14	15.16.5	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. (i) 200 mm dia (OD-200 mm & ID-175 mm nominal)	150.00	Met er	733.00	109950.00
15	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	500.00	Met er	84.00	42000.00
16	1.7	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit asrequired. (for Hot Water System)				
	1.17.13	4 Core x 2.5 sq.mm	60	Mtr	189.00	11340.00
	1.17.31	4 Core x 6 sq.mm	45	Mtr	431.00	19395.00
	1.17.29	2 core x 6 mm	90	Mtr	431.00	38790.00
	1.17.2	2 core x1.5 mm	25	Mtr	77.00	1925.00
		<b>Total -a</b>				<b>3442100.00</b>

		<b>FOR HOT WATER SYSTEM(IN HOSPITAL AREA)</b>				
17	DSR-Civil-2023	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and 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.				
	18.9.4	32 mm nominal dia Pipes	35	Mtr	438.60	15351.00
	18.9.5	40 mm nominal dia Pipes	40	Mtr	563.05	22522.00
	18.9.6	50 mm nominal dia Pipes	25	Mtr	794.25	19856.25
	18.9.3	25 mm nominal dia Pipes	35	Mtr	355.40	12439.00
	18.9.2	20 mm nominal dia Pipes	25	Mtr	274.30	6857.50
18	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.17.3	40 mm nominal bore	15	Each	826.10	12391.50
	18.17.2	32 mm nominal bore.	15	Each	689.60	10344.00
	18.17.1	25 mm nominal bore	15	Each	622.40	9336.00
19		Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	18.19.4.2	50 mm dia-Horizontal	6	Nos	1445.15	8670.90
	18.19.5.2	65 mm nominal bore	2	Nos	2291.55	4583.10
	18.19.3.2	40 mm nominal bore	6	Nos	1134.70	6808.20
20	DSR	Providing, fixing, testing and commissioning of CI Y- strainer				
	30.7.4.8	40 mm dia (1 no with each pump)	3	Each	4836.00	14508.00
		<b>Total (DSR-Civil)</b>				<b>143667.45</b>
		<b>Total of DSR-Civil Items( 16 to 19)</b>				<b>143667.45</b>

		<b>Modified Estimated cost using correction factor on existing items of the DSR-2023 @ 0.973(Only Item No-16 to 19 )</b>				139788.43
		<b>Total (b)</b>				<b>139788.43</b>
		<b>Total (a + b)</b>				<b>3581888.43</b>
		COST INDEX rate on BOQ items as per cpwd office memoredum no-68/AD-TAS/CI/2024/282-Hindi dated 11/09/2024 add CI @14%.				501464.38
		<b>Total (A) DSR</b>				<b>4083352.81</b>
		<b>HT/LT PANEL ALONG WITH MISCELLANEOUS ITEMS</b>				
21	NDSR	Repairing and service of LT panel with air circuit breaker installed in the substation, hospital & staff quarter building and distribution board of hospital premises , the following work are as under (a)cleaning (internal & External) & Repairing of feeder compartment , air circuit breaker & MCCB with air blower or vacuum cleaner, (b) Replacement of defective MCCB's, main Switches, HRC Fuses, Voltmeter, Ammeters, P.F Meters & Energy meter of LT Panels, (C) Testing & calibration of relay on LT panels, Over load relay, master Relay etc. (d) Repair of air circuit breakers of LT panels installed at the hospital & staff quarters,(e) servicing /repairing /replacement of damaged/defective parts of ACB's,(f) Repair of capacitor panels of substation (g) replacement of defective/damaged capacitor of capacitor panels of (h) LT cable joiting kits of LT panels (i) cleaning (External and Internal) of Distribution boards in the office premises and rectification of burnt thimble, LED indication Lamps,wires,and	1	Job	822250.0	822250.00

		<p>components , (j) Replacement of contactors, fuses indicated lamps, and control auxiliaries of capacitor panels (500 X 2) KVAR ,indicating instruments/meter and other small parts inside panels. (k) Servicing, Checking, Cleaning , Testing of ACB (Air Circuit Breaker) Testing of relay, testing and commissioning of interlocking control wiring of ACB (Air Circuit Breaker) , ACB to Incomer (1 to 3)-1600 A(415 V), Bus Coupler 2500 A,415 V, Isolator-Panle-2 Nos. MCCB -48 Nos-Rating-200-A,250,A,400A,160A,100A,320A, 800A,630A</p>				
	NDSR	<p>Repair &amp; service of HT VCBs 33 KV ,Main Incomer HT-Voltage-36000,Current -1250 AMP,33 KVA Outgoing -1 Nos Voltage 36000 Current-1250 AMP, 33 Kva Outgoing Panel-2 Voltage -36000,Current_1250 AMP,Transformer-1 Nos,1500 KVA Transformer -2 Nos 1500 KVA,Transformer -1 Isolation 2500 A ,415 Volts, Trnsformer -2 Isolation Panel-2500 A 415, ACB to Incomer-2500 A,415 Volts, ACB to Buscoupler 2500 A,415 V, Synchronizing ACB Panel-2 Nos 3200 A,415 V,ACB to Capacitor Panal-2 Nos /100 A,415 V, complete with Material with replacement of defective parts &amp; testing etc. Checking/Testing of HT tripping system/Bushing transformers &amp; HT Panels etc, Replacement of HT Panel indicators Lamps, Ammeters, Voltmeter, Calibration or replacement of HT Relays &amp; testing etc. Termination kit of HT panels/ Transformers, Painting of HT Panels/2nosX 1500 KVA Transformers with two coats of enamel/ burger</p>	1	Job	526192.9	526192.85

		<p>paints with M&amp;L, Repairs/ replacement of HT meters, checking the moving parts, tightening of nuts and bolts etc. cleaning of electrical panels with blowers, Supply of 33kv of approved make VCB VI Bottle-3 Nos, Installation of VI Bottle and Servicing testing of 33kV CG VCB-1 Nos, Insulate job for 33kv VCB Breaker Pole-1 Nos, Powder coat job for 33kv VCB Breaker-1 Nos, Supply of phase barrier Acrylic Sheet of size 8 mm x 4 mm x 10mm Without Spout bushing along with Fabrication of Phase Barrier sheet and its modification works-1 Nos., Supply of 33kv insulating drive rod with connecting bolt and nylon guide bush with Hardware-6 Nos. Supply and installation of Socket Contact Sleeve-3 Nos, .Maintaining of work to permit boards and danger board on each panel and also submitted testing report of transformer (earth testing and insulation testing).</p>				
23	NDSR	<p>6- 8mm Rubber Insulated Floor Mat width 1-meter Base Material Premium Vulcanized Natural/Synthetic Rubber, Compound Type Fully molded solid rubber sheet (no cloth/fabric layer inside), Compound Type Fully molded solid rubber sheet (no cloth/fabric layer inside), Surface Pattern Checkered / Grooved / Anti-skid finish, Colour Dark Grey / Black (standard)</p>	50	Mtr	3392.5	169625.00
24	NDSR	<p>Supplying and Installation of 7.5 HP Submercible Pump three phase motor, discharge outlet 50 mm to 80 mm /head range 30 mtr /flow rate 1000 Ltr/M including all fitting</p>	10	Each	86825.0	868250.00

25	NDSR	Design, supply, fabrication and fixing of Signage board (16 ft. x 4 ft.- 1 no. and 8 ft x 3 ft ) using words made of acrylic cut out letters with LED and reflective vinyl sheet as per approved design with following specification. Board shall be fabricated with 3 mm thick i) ACP sheets of reputed make. Powder coated Aluminium sheet shall be fixed from the rear side of the entire board to make box section. ii) ESIS Logo letters (Hindi and English) shall be made of Acrylic cutout letters of reputed make and shall be uniformly illuminated by using Digital LED light of reputed make. iii) Powder coated Aluminium clips and brackets shall be used of minimum 3 mm thickness as per direction of Engineer In charge. iv) Words of other matter of the signage board shall be fixed using reflective vinyl cutout letters. Note* Scope of work and design may be little modified or revised as per the direction of Engineer -In-charge. No extra cost shall be given for the same.	1	Job	373750.0	373750.00
26	NDSR	3" Deep ACP Box with in side Aluminium Pipe Frame Letters: 70-80 mm Deep white Powder coated/Painted Aluminium channel letter with Laser cut 040 acrylic on front and back Covered with ACP/Sunboard 8mm, Letter should be completely sealed with silicon to make it 100% water proof in outdoor. ADS White LED Module and E Power/Meanwell Power supply to be used for backlit purpose Fitting MS "L" Channel Angle.				
	(i)	Size: 5' x 55' (Signage with Logo Top To OPD)	275	Sq ft	2127.5	585062.50

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	(ii)	Size: 5' x 55' (Signage with Logo Top To EMERGENCY)	275	Sq ft	2127.5	585062.50
27	NDSR	Aluminium Composite Pale ACP Sheet 3MM	200	Sq ft	517.5	103500.00
28	NDSR	a) EMERGENCY Size: 17" inch Hight Qty. 9 nos. b) EMERGENCY Size: 21" inch Hight Qty. 7 nos. c) OPD logo Size: 18" inch Hight Qty. 6 nos. Logo Size: 34"x34"	425	inch	287.5	122187.50
29	NDSR	Providing & Fixing of Illuminated signages display for Fire exit (both side display)	35	no.	3220.0	112700.00
30	NDSR	Supply Installation Testing and commissioning of Cool White 12.5-Meter-High Mast Pole Led Street Light (tree structure type) including the cost of GI round pole and erection etc in complete aspects	2	no.	90275.0	180550.00
<b>HEIGHT INCREASE OF CHIMNEY(8 Mtr)</b>						
31	NDSR	SITC of GI/Steel chimney pipe to rise the height of the existing chimney to at least 8 metre along with Cutting & Removal: Carefully cut and remove existing chimney cap/cowl and top, Surface Preparation: Mechanical cleaning/sandblasting of existing top surface for welding MS Shell Extension: Fabrication of MS plates (IS: 2062 Gr. A)Supply of MS angle rings/flanges and stiffeners for the new Shifting & Lifting: Transport to site and crane rental for lifting/erection. (Approx. 1 day mobile crane hire)Welding & Joining: Full penetration butt welding of the new section Ladder & Platform Extension: Material and installation for extended access and new platform Heat Resistant Painting: Application of primer and heat-resistant paint all the fitting, accessories, angle, channel structure required in complete aspects as required.	1	Job	557750.0	557750.00

<b>HOT WATER SYSTEM</b>						
<b>HOT WATER STORAGE TANK</b>						
32	NDSR	<p>Providing, fixing, testing and commissioning of SS 304 horizontal hot water storage tank (CAPACITY 10000 LITERS) fabricated from 5mm thick Shell and 5 mm Dish end SS suitable for min 5kg /sqm working pressure. Tank shall be provided with water flow meter at inlet /outlet, overflow/drain connection with MH cover, pressure relief valves, pressure guage at inlet /outlet with isolation cock, thermometer at inlet/outlet. All the valves and accessories shall be suitable for an operating pressure of 5kg /sq.cm Tank shall be insulated with glass wool insulation including 24-gauge aluminium cladding. Tank shall provide with 15mm dia testing spout with valve (inlet temperature to hot water storage tank 60-65 degree .C) The flanges shall be machined from SS 304 sheets with dimensions confirming to ANSI,B 16.5 no.150.The nozzles shall be SS pipes (tank shall be fabricated as per unfired pressure vessel code IS 2825-1969, IS 226/ IS 2062) along with 72kw electrical element provision. Tank shall be complete with rockwool insulation with 24-gauge aluminium. 1 no. Cold water inlet 50 mm dia 1 no. Hot water outlet 65 mm dia 1 no. hot water return line 40 mm dia. 2 no. heat pump point of 65 mm dia. 12 nos. 6 kw electric element each point in tank 32 mm dia. 2 nos. Heat pump sensor point in tank 20 mm dia.</p>	1	Each	1782500.0	1782500.00
<b>HOT WATER GENERATOR</b>						
33	NDSR	<p>Supplying, Installing, Testing &amp; Commissioning of electrical Hot Water Generator 500 KW. voltage</p>	1	Nos	2875000.0	2875000.00

		415V,3 phase, frequency 50 HZ,XLPE power cables of suitable rating (e.g., 3.5 core 300 sq. mm XLPE cable)				
		<b>PUMPS</b>				
34	NDSR	Providing, fixing , testing & commissioning of Horizontal centrifugal monoblock pump set with cast iron body, with SS impeller, stainless steel shaft coupled with TEFC squirrel cage induction motor suitable for operations on 415/440volts, 3 phase, 50Hz, AC Supply mounted on common MS channel base frame.				
		Hot water return pumps	2	Each	132250.0	264500.00
		Hot water circulation pumps	2	Each	115000.0	230000.00
35	NDSR	Providing, fixing, testing and commissioning dial type pressure gauge of rating 0-10 kg./cm2 with gun metal isolating cock pig and connecting pipe.	15	Each	3968	59512.50
36	NDSR	Providing, fixing, testing and commissioning of Temperature Gauges of an approved make.	10	Each	5175.0	51750.00
37	NDSR	Providing, fixing, testing and commissioning of Air release valves screwed ends with ball valve of approved brand of manufacture, with accessories etc., complete	5	Each	2300.0	11500.00
		<b>ELECTRICAL WIRING</b>				
38	NDSR	Providing, fixing, testing and commissioning of dust, damp and vermin proof, free floor standing factory built sheet steel enclosed nondrawout modular panel for water supply pumps, fabricated out of suitable sized square tubular section and covered with 2.0mm thick CRCA sheet, hinged doors of 2mm thick CRCA sheet, duly painted complete with earth bus, necessary metering protections & indications and mounted with the following including all inter connection etc. (Including				

	<p>earthing). One No. 125 amps TP incoming MCCB complete with the following: 1 No. 0-500 volts 96x96 sq. mm ammeter with selector switch and fuses. (1 set). 1 No. 0-100 amps 96x96sq.mm ammeter with 100/5 amps ratio CT's and selector switch. 1 No. 0-100 amps 96x96sq.mm ammeter with 100/5 amps ratio CT's and selector switch. Over voltage and under voltage tripping mechanism for persistent voltage fluctuations of more than <math>\pm 10\%</math> of the rated voltage for more than 5 minutes. (1set) Phase indicating lamps with toggle switches. Indication lamps for ON/OFF/TRIP status of motors. Aluminium bus bar of 100 amps for three phase and neutral. Outgoing Feeders/Starters. 3 Nos. 63amps TPN MCB each suitable for 9.56 KW Air cooled heat pumps panel. 3 Nos. 16 amps DP MCB with Dol starter each suitable for 1.1 KW motor for hot water circulation pumps. 2 Nos. 16 amps DP MCB with Dol starter each suitable for 1.1 KW motor for hot water return pumps. Rotary manual/auto/off switch. (8 Nos.) Providing, fixing, testing and commissioning electrical back of 72 KW ( 12 x 6 kw)in each hot water vessel (to be operated manually) complete with electrical control panel for electrical element. 12 Nos. 32 amps MCB for electric elements. 1 nos temperature controller Spares 16 amps TPN MCB - 3 Nos.</p>				
	<p>10 amps TPN MCB - 3 Nos. Note : All switch gear/panels shall be suitable for 10 KA rating. All outgoing will have 96 sq. mm size ammeter and CT. All starter will have spare 10 amps 230 V coil</p>	1	Set	396750.0	396750.00

		auxiliary contractor for building Automation system. All pumps to be provided with duty selector switch. All pumps to be provided with sequence timer 220/440 V AC/DC and alternate working of pumps between 6 to 8 hours or alternate use of pumps after one service in sequence. All pumps to be provided with over load relay. All starter to be provided with single phase preventor. Necessary cable alleys for space switches, level controller internal wiring and copper earthing of all equipment shall also be included. All switch gears/control gears shall be motor duty rating.				
39	NDSR	Supplying and erecting steel tubular swaged pole 139.7 x 114.3 x 88.9 mm dia with 4.5 x 3.65 x 3.25 mm thickness (5+2+2 m ) length respectively and total 9 m long with pole cap, base plate in provided foundation (weight 113 kg) as per specification.	15	Each	16675.0	250125.00
40	NDSR	Repairing and servicing of all pressurised mechanical ventilation system 1-Fan & Motor Overhaul: Inspect the fan housing, shaft, and impellers. For the 5 HP motors, check insulation resistance (megger test) and earthing continuity.2-Bearing Replacement: Replace worn bearings with OEM-recommended spares to ensure low-noise operation3-Dynamic Balancing: Perform on-site dynamic balancing of the fan blades to eliminate vibrations that could damage the motor or duct mounts.4-Drain Pan Maintenance: Deep clean stainless steel drain pans and condensate pipes to prevent bacterial growth and choking5-Use CPRX compound and aluminium tape on all duct joints to eliminate air leakage,	1	Job	1057563.0	1057563.00

	<p>which is critical for maintaining design pressure.6-Thermal Insulation: Patch or replace damaged insulation (typically 50mm rock wool or similar) to prevent thermal loss and condensation7-Damper Testing: Verify that backdraft and fire dampers open and close fully to ensure the integrity of the pressurized zones8-Performance Testing: Measure final airflow (CFM), static pressure, and noise levels to confirm they meet original design specs9-VFD Troubleshooting: Inspect Variable Frequency Drives for dust accumulation, loose terminal connections, and proper cooling fan operation,also replacement of 5 HP (3.7 kW), 3-Phase, 415V, 50Hz, 4-Pole/2-Pole, 1440/2880 RPM, squirrel cage induction motor, TEFC enclosure, Class F insulation, IP55 protection, Foot Mounted (B3), IE2/IE3 efficiency, compatible with inverter/VFD, cast iron body</p>				
	Total NDSR item				<b>11986080.85</b>
	<b>Total (B)</b>				<b>11986080.85</b>

MODULAR OT						
S.No.		Description of item	Qty	Unit	Rate (INR)	Total Amount (INR)
1	NDSR	S/I/T/C of Pre-Fabricated Operating Room Wall & Ceiling of electro galvanized steel (EGP) Sheet 1.50 mm thick with Backed support of 10 mm Thick. Gypsum Board complete with all necessary supports, as per technical specifications with SMS Technology.	200	Sq Mtr.	16750.00	3350000.00
2	NDSR	S/I/T/C of Filling of all joints and cavities with metallic Epoxy filler & water based liquid plastic aseptic and self-sterilizing wall coating system with primer & soft filler, as per technical specifications (antibacterial)	200	Sq Mtr.	4525.00	905000.00
3	NDSR	S/I/T/C of Laminar Flow (Planar Ceiling) constructed out of 1.6mm thick aluminum sheet of size 2440x2440mm complete set, as per technical specifications duly CE Marked.	2	Nos	504900.00	1009800.00
4	NDSR	S/I/T/C of Peripheral Light with dimming, each having 2x36W LED, Electronic Ballast (size: 600x600mm) complete set, as per technical specifications. (Hermetically sealed)	16	Nos	9500.00	152000.00
5	NDSR	S/I/T/C of Tile based and membrane type Surgeon control panel, mounted flush in the theatre wall, complete set with electrical Distribution Board, as per technical specifications	2	Nos	425450.00	850900.00
6	NDSR	S/I/T/C of X-ray viewing Screen as per technical specifications	2	Nos	35450.00	70900.00
7	NDSR	S/I/T/C of Seamless flooring with perfectly curved fish covings resistant to mechanical stress and dynamic load, and having Electro Static Discharge (ESD) / anti-conductive properties, thickness 2 mm, washable — complete as per technical specifications.	96	Sq Mtr.	7250.00	696000.00

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8	NDSR	S/I/T/C of Storage Unit as per technical specifications.	2	Nos	85000.00	170000.00
9	NDSR	S/I/T/C of Automatic Sliding Door, complete with automation unit, frame, viewing window, complete set, as per technical specifications (extruded aluminum), each of size 2100 mm x 1800 mm (H x W of door frame).	2	Nos	515450.00	1030900.00
10	NDSR	S/I/T/C of Automatic Sliding Door, complete with automation unit, frame, viewing window, complete set, as per technical specifications (extruded aluminum), each of size 2100 mm x 1000 mm (H x W of door frame).	2	Nos	495000.00	990000.00
11	NDSR	S/I/T/C of Scrub Sink – 2 bay, made in stainless steel 304 finish having sensor & foot operated with thermostatic mixing valve control to maintain water temperature, indigenous complete set as per enclosed specifications.	2	Nos	245450.00	490900.00
12	NDSR	S/I/T/C of Double Arm Anaesthesia Pendant with 1000 mm + 800 mm long horizontal arm with horizontal movement as per CE Certified/UL Listed, complete set as per technical specifications.	2	Nos	954750.00	1909500.00
13	NDSR	S/I/T/C of Double Arm Surgeon pendant with 1000mm+800mm long horizontal arms with horizontal movement as per CE Certified/ UL listed, complete set as per technical specifications.	2	Nos	954750.00	1909500.00
14	NDSR	S/I/T/C of Hatch Box as per technical specifications.	2	Nos	85000.00	170000.00
15	NDSR	S/I/T/C of View Window as per technical specifications.	2	Nos	80000.00	160000.00
16	NDSR	S/I/T/C of LED OT light European CE Certified and US FDA as per technical specifications.	2	Nos	1984400.00	3968800.00
17	NDSR	S/I/T/C of HD CAMERA-Full HD Sensor: 1" CMOS for low noise + great dynamic range,4K UHD + excellent Full HD output, Professional XDCAM codec support, better low light	2	Nos	477500.00	955000.00

		performance & dynamic range, Advanced codecs like XAVC, ProRes, RAW options in cinema model, HD: Up to 120 fps+ (for slow motion)				
18	NDSR	S/I/T/C of HD Monitor-with specification of Screen Size: 42.5,Resolution: 4K UHD (3840×2160),High-end professional IPS, Factory-calibrated / ideal for colour-critical tasks, Multiple HDMI, DisplayPort, HDR support, KVM, PiP/PbP, hardware calibrators complete as per direction Engineer In charge.	2	Nos	395000.00	790000.00
19	NDSR	S/I/T/C of Pressure Relief Dampers per technical specifications.	2	Nos	83500.00	167000.00
20	NDSR	S/I/T/C of Writing Board as per technical specification.	2	Nos	26900.00	53800.00
21	NDSR	S/I/T/C of Electrical Installation.	2	Lot	215000.00	430000.00
22	NDSR	S/I/T/C of Ducting Installation including SITC of hepa filters	2	Lot	250000.00	500000.00
23	NDSR	S/I/T/C of MGPS Installation.	2	Lot	145000.00	290000.00
						21020000.00
					Taxable amount	21020000.00
					GST @ 18%	3783600.00
					<b>Total Amount</b>	<b>24803600.00</b>
		<b>Total amount (C )</b>				<b>24803600.00</b>

<b>HVAC SYSTEM</b>						
<b>Sr. No.</b>		<b>Description of Item</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
<b>A</b>	NDSR	<b>SITC of Chillers</b>				
<b>1</b>		Supply, Testing and Commissioning of 250 TR Air cooled Screw chiller each chiller consist of semi hermetic screw compressor with suction gas cooled motor, shell & tube type , direct expansion evaporator with first charge of oil and <b>environmentally friendly HFC - 134a refrigerant</b> . Air cooled				-

		condenser suitable for design capacity with blue fin coating and condenser coil guard inconnected refrigerant piping fittings valves etc, electrical panel housing with VFD, Evaporator insulation with 19 mm thick soft bubbling foam. <b>AHRI Approved</b> Performance testing facility ensuring reliable and certified performance. each chiller consist of MODBUS comm card, flow switch, victualic groove ends etc.				
		<b>Chiller Design Parameter:</b>				
		Chiller capacity - 250 TR	2	Nos	9794000.00	19588000.00
		Chiller water inlet & outlet temp - 54 Deg F / 44 Deg F				
		Ambient temp - 95 Deg F				
		chilled water flow - 606 GPM				
2.0	NDSR	Cost towards Dismantling of existing Chiller and removal from terrace including lifting shifting via crane.	3	Nos	280000.00	840000.00
3.0	NDSR	Cost towards lifting shifting & installation of new chillers at terrace via crane and lifting mechanism	2	Nos	280000.00	560000.00
4.0	NDSR	SITC of 200 mm dia MS pipe for inlet & outlet line	40	Mtr	9500.00	380000.00
4.1	NDSR	Cost towards Replacement of 200 mm dia rubber bellow Location: chillers 1 &2 inlet & outlet line	4	Nos	41300.00	165200.00
4.2	NDSR	Cost Towards replacements of Butterfly valve at inlet & out let line for chiller 1&2	4	Nos	29500.00	118000.00
4.3	NDSR	Cost towards replacement of Pressure Gauge (0-16 kg) Location: pumps & chiller	4	Nos	4200.00	16800.00

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4.4	NDSR	Cost towards replacement of Temperature Gauge (0-100 C)	4	Nos	4200.00	16800.00
4.5	NDSR	Cost towards Replacement of 19 mm Nitrile Insulation of inlet and outlet line of chiller	40	Rmt	2100.00	84000.00
4.6	NDSR	Cost towards SITC of aluminium cladding at inlet and outlet line	40	Rmt	1196.00	47840.00
4.7	NDSR	Cost Towards replacements of Balancing valve at out let line of chiller Size: 200 mm	2	Nos	330400.00	660800.00
5	NDSR	Cost towards SITC of Rubber pad for Chiller base. Location: Chiller 1 &2	16	Nos	12500.00	200000.00
6	NDSR	Supply, Installation, Testing and Commissioning of electrically driven pump set having End suction Pumps set with bronze/ stainless steel impeller and mechanical seal. Motor shall be TEFC Sq. Cage, 1450 RPM, foot mount, IP55, Class F insulation, high efficiency IE3/IE5 rated, suitable for electrical supply of 3ph-4 wire / 415V/ 50hz. Pumps shall be PN-16 rated and with high efficiency (efficiency 75% and above) as specified. Installation of Pumps includes Unloading, lifting-shifting, positioning, levelling, erection & installation in place. The pumps will be installed free of vibration.				0.00
6.1	NDSR	<b>Insulated Primary Chilled</b> Water Flow Rate: 142 m3/hr Head: 12 M	3	Nos	1050000.00	3150000.00
6.2	NDSR	<b>Secondary chilled Water Pumps</b> Water Flow Rate: 127 m3/hr	3	Nos	1100000.00	3300000.00

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		Head: 21 M				
6.3	NDSR	Cost towards Replacement of 200 mm dia rubber bellow Location: primary 1,2,& 3 & Secondary pump 1,2 & 3	12	Nos	35000.00	420000.00
6.4	NDSR	Cost towards Replacement of 200 mm dia Y strainer at inlet of pump Location: primary 1,2, & 3 & Secondary pump 1,2 & 3	6	Nos	65000.00	390000.00
6.5	NDSR	Cost Towards replacements of Butterfly valve at inlet & out let line of All pumps	12	Nos	32000.00	384000.00
6.6	NDSR	Cost towards replacement of Pressure Gauge (0-16 kg)	12	Nos	4200.00	50400.00
6.7	NDSR	Cost towards replacement of Temperature Gauge (0-100 C)	12	Nos	4200.00	50400.00
6.8	NDSR	Cost towards Replacement of 19 mm Nitrile Insulation of pump inlet and outlet line	200	Sqmt r	1100.00	220000.00
6.9	NDSR	Cost towards SITC of aluminium cladding at inlet and outlet line	200	Sqmt r	900.00	180000.00
7.0	NDSR	Pressure testing and painting of chilled water line	100	Mtr	500.00	50000.00
9	NDSR	Removal & Supply & installation of 19 mm thick Nitrile insulation with 7 mil glass cloth 19 mm thick	550	Rmt	2100.00	1155000.00
10	NDSR	Pressure Guage with Syphone - AHU	76	Nos.	4720.00	358720.00
11	NDSR	Temperature Gauge - AHU	76	Nos.	4720.00	358720.00

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12	NDSR	SITC of cloth canvas for Machine mouth piece connection	38	Nos	5900.00	224200.00
13	NDSR	Replacement of belts of AHU	76	Nos	1416.00	107616.00
14	NDSR	Replacement of AHU filters	228	Nos	2950.00	672600.00
15	NDSR	Cost towards Chemical Descaling of all AHU	38	Nos	29500.00	1121000.00
16	NDSR	Cost Towards replacement of AHU panel if required	5	Nos	132160.00	660800.00
17	NDSR	Overhauling of AHU Blower and blower balancing if required	38	Nos	6500.00	247000.00
18	NDSR	Servicing of AHU Motor	38	Nos	2500.00	95000.00
19	NDSR	Repairing of Damaged based frame of AHU	38	Nos	3000.00	114000.00
20	NDSR	Repairing of AHU Coil	38	Nos	26500.00	1007000.00
21	NDSR	Replacement of Fans and Motor Bearing	76	Nos	3800.00	288800.00
22	NDSR	Cost towards SITC of 22 G G.I Duct for AHU supply & return wherever required 120 GSM	200	Sqmt r	1650.00	330000.00
23	NDSR	Removal & Supply & installation of 19 mm thick Nitrile insulation with 7 mil glass cloth	200	Sqmt r	900.00	180000.00
24	NDSR	Cost towards SITC powder coated supply & return diffuser aluminium square diffuser & linear grill	40	sqmt r	6000.00	240000.00
25	NDSR	Cost towards Replacement of microprocessor-based temperature controller with LED display control 0-10V DC output	45	Nos	14160.00	637200.00

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26	NDSR	Cost towards Descaling of FCU coil	45	Nos	9440.00	424800.00
27	NDSR	Replacement of Valve set	45	Nos	11200.00	504000.00
28	NDSR	Cost towards replacement of FCU filter	45	Nos	6000.00	270000.00
29	NDSR	Supply of inline fan				
30	NDSR	200CFM Location: 1st floor electrical passage, dr. common	2	Nos	15500.00	31000.00
31	NDSR	400CFM Location: 4th floor Pantry	1	Nos	18500.00	18500.00
32	NDSR	900 CFM Location: 3rd floor Toilet, 2nd floor Main toilet S25	2	Nos	19100.00	38200.00
33	NDSR	3000 CFM Location: 3rd floor Waiting & Sterling	1	Nos	39100.00	39100.00
34	NDSR	10000 CFM Centrifugal blower fan Location: 4th floor Terrace	1	Nos	413000.00	413000.00
35	NDSR	Cost towards Dismantling of rusted duct of Kitchen & exhaust fans at terrace level 20 G Angle flange. Location: 4th floor Terrace	250	sqmtr	3186.00	796500.00
36	NDSR	Cost towards MS L angle for Fans & Duct Support	800	Kg	251.00	200800.00
37	NDSR	Starter panels for fans	2	nos	51920.00	103840.00
38	NDSR	Cost towards repairing of MAIN incomer Panels accessories Such replacement of Damage Selectoe switches, Ammeter, Voltmeter, LED indicating lamps, Slocks etc	1	Job	775000.00	775000.00
39	NDSR	SITC of Electrical Junction box of 1000 Amp with copper bushbar	2	Nos	125000.00	250000.00
40	NDSR	SITC of 300 sqmm 3 core Aluminum armoured cable from chiller panel to Junction Box for all	300	mtr	9000.00	2700000.00

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		2 nos chiller Note : considering chiller panel at nearby location				
41	NDSR	Supply, Laying, Termination, testing and commissioning of electrical Cu FRLS flexible cables 300 sqmm X 1 Core	100	mtr	14000.00	1400000.00
42	NDSR	Cost towards aluminium earthing Patti 50X6 mm	200	Mtr	300.00	60000.00
43	NDSR	Cost Towards Repairing of electrical Starter replacing Contactor, switches, LED with all the required internal wiring and accessories	38	Nos	31270.00	1188260.00
44	NDSR	cost towards repairing of pump starter panel for primary & Secondary Pump including all MCB, Indicator lamp, push button etc	6	Nos	30680.00	184080.00
45	NDSR	Cost towards SITC of 20 HP VFD for Secondary Pump Panel	3	Nos	81420.00	244260.00
		<b>Total</b>				<b>48311236.00</b>
		<b>Total (D)</b>				<b>48311236.00</b>
		<b>Grand Total for Electrical Work(A+B+C+D)</b>				<b>8,91,84,269.66</b>

**Buy Back and Credit of Dismantled & Unserviceable Materials**

The Contractor shall take over and remove all dismantled, obsolete, and unserviceable materials/items generated during the execution of the work, including HVAC chillers, chilled water pumps, modular OTs, electrical materials, doors/windows, false ceiling, plumbing and sanitary items, steel/MS works, and other dismantled components as specified in the Schedule of Buy Back and Credit of Dismantled & Unserviceable Items. The total assessed buy-back/credit value amounting to Rs. 20,18,800/- (Rupees Twenty Lakh Eighteen Thousand Eight Hundred Only) shall be treated as recoverable value and shall be deducted from the Contractor's Running Account Bills/Final Bill.

The Contractor shall be solely responsible for dismantling, handling, lifting, transportation, disposal, and clearance of all such materials from the site, complete in all respects, as directed by the Engineer-in-Charge, without any additional cost to the Department. Payment/recovery under this provision shall be considered strictly on the basis of actual quantity of dismantled items/materials taken over from the site and as certified by the Engineer-in-Charge based on actual work executed at site.

<b>SPECIAL REPAIR (CIVIL &amp; ELECTRICAL) WORKS OF ESIS HOSPITAL MARGAO IN GOA- SUBMISSION OF DETAILED ESTIMATE- SUBMISSION OF DETAILED ESTIMATE FOR APPROVAL-REG.</b>						
<b>(C) BUY BACK AND CREDIT OF DISMANTLE &amp; UNSERVICEABLE ITEMS</b>						
<b>Sr.No.</b>	<b>DSR 2025/NDSR</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
		<b>HVAC/Chiller</b>				
1	NDSR	Buyback of chiller	3	Nos	500000	15,00,000
2	NDSR	Buyback of Chilled Motor Pump	6	Nos	10000	60,000
3	NDSR	Buy Back Value Modular Ots			300000	300000
		<b>Total for buyback item (A)</b>				18,60,000
<b>Credit of dismantle &amp; unserviceable items - electrical -</b>						
Schedule of Credit of Dismantle /unserviceable material including disposal from site and cleaning the site in all complete as per direction of engineer in charge.						
	NDSR	Insulated copper conductor	2000	Mtr	5	10,000
	NDSR	Modular GI Box as complete	400	Each	2	800
	NDSR	MCB /VCB bottle	100	Each	10	1,000

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	NDSR	Panel/Down Light/Surface Light	700	Each	25	17,500
	NDSR	Pump/Motor	2	Each	3000	6,000
		<b>Total for buyback item (B)</b>			<b>Total(B)</b>	<b>35,300</b>
<b>Credit of Dismantle &amp; Unserviceable Items</b>						
19		<b>Basement Toilet Floor</b>				
	NDSR	Door/Windows	1000.00	Job	10.00	10000.0
	NDSR	Steel/MS Work	2000.00	Each	30.00	60000.0
	NDSR	False ceiling	1500.00	Job	9.00	13500.0
	NDSR	Plumbing & Sanitary Items	200.00	Job	200.00	40000.0
		<b>Total for buyback item (C)</b>			<b>Total(C)</b>	<b>123500.0</b>
					<b>Total (a+b+c)</b>	<b>-20,18,800.0</b>