

TENDER DOCUMENT FOR

**Establishment of Modular Operation Theatres and allied Civil, MEP
Works for National Institute of Ayurveda (NIA), Panchkula**

WAP/CMU-II/2024-25/ NIA Panchkula/OT/02

Date: 23.07.2024

**WAPCOS LIMITED
76-C, INSTITUTIONAL AREA, SECTOR-18, GURGAON,
HARYANA-122015**

July, 2024

TABLE OF CONTENT

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

NOTICE INVITING TENDER (NIT)

NOTICE INVITING TENDER (NIT)**NIT No. WAP/CMU-II/2024-25/NIA Panchkula/OT/02****Dated 23.07.2024**

WAPCOS Limited (A Govt. of India Undertaking) on behalf of National Institute of Ayurveda (NIA), Jaipur, Ministry of AYUSH, Govt. of India, invites open online Percentage Rate tender from experienced, competent and eligible bidders in a two-envelope system as per below:

1.	Work/ Project	Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula
2.	Site / Location	Panchkula, Haryana
3.	Website for viewing tender, Corrigendum/ Addendum, if any.	www.wapcos.co.in & www.etenders.gov.in/e procure
4.	Website for Registration/ uploading of Tender	www.etenders.gov.in/e procure
5.	Estimated / NIT Cost	Rs. ₹ 7,87,53,910/- excluding GST
6.	Cost of Tender Document	Rs. 10,000/- (Rupees Ten thousand Only) as Tender Processing Fee in the form of Demand Draft
7.	Earnest Money Deposit (EMD) / Bid Security	<p>Rs. 15.76 lakhs (Refundable) in the form of Insurance Surety Bonds RTGS/NEFT/D.D./Banker's cheque/FDR in favors of 'WAPCOS Limited' payable at Gurugram, Haryana</p> <p>OR</p> <p>A part of EMD is acceptable in the form of Bank Guarantee including e- Bank Guarantee also. In this cases Rs. 7.88 lakhs EMD to be deposited in shape prescribed above and balance Rs. 7.88 lakhs will be accepted in form of Bank Guarantee issued by Nationalized/ Scheduled Commercial Bank approved by Reserve Bank of India (RBI).</p> <p>The bank account as per details: Name of Bank: Indian Overseas Bank Bank Account Number: 193502000000405 IFSC Code: IOBA0001935 Branch Name: National Horticulture Board (NHB) Building, G-85, Industrial Area, Sector-18, Gurugram-122015, Haryana</p> <p>Note: Bid Security shall remain valid for a period of 45 days beyond final bid validity period</p>
8.	Solvency Certificate - Specific to this Bid submission only and mentioning the name of the work/project	Rs. 3.15 crore in original from a Nationalized/ Scheduled Commercial Bank approved by Reserve Bank of India (RBI). The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C,

		Institutional Area, Sector-18, Gurugram, Haryana quoting the name of the work. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate. Note: This Certificates will be verified from the issuing authority by WAPCOS.
9.	Joint Ventures / Consortia of firms	Not allowed
10.	Project Completion Period	90 Days from the Date of Commencement of work or the first date of handing over of the site, whichever is later
11.	Bid Validity Period	90 days from the date of opening of Technical bid
12.	Site Visit	Bidders are advised/encouraged to visit the site for actual assessment of the project site location and its consequences during execution of work
13.	Pre Bid Meeting	01.08.2024 at 3:00 PM to be held in the office of Addl. Chief Engineer, Construction Management Unit-II WAPCOS Office, Sector-18 Gurugram-122015, Haryana
14.	Last date & time for online submission of Technical & Financial Bid	13.08.2024 up to 15:00 hours
15.	Offline Submission of Technical document as per Tender	14.08.2024 up to 12:00 hours in the office of Addl. Chief Engineer, Construction Management Unit-II WAPCOS Office, Sector-18 Gurugram- 122015, Haryana
16.	Online opening of Technical Bid	14.08.2024 up to 15:00 hours
17.	Online opening of Financial Bid	Intimated to Technical Qualified Bidders.
18.	Tender Inviting Authority & Communication address during Tendering and Execution of Works	Addl. Chief Engineer Construction Management Unit-II WAPCOS Limited, Sector-18, Gurugram, Haryana-122015 Email: rd@wapcos.co.in , ckr@wapcos.co.in Contact No. +91124-2399830
19.	The Bid Security/ EMD / Solvency Certificate / BG against Performance Security/ BG against Mobilization Advance/ shall be addressed to WAPCOS Corporate Office	WAPCOS Limited 76-C, Institution Area Sector-18, Gurugram, Haryana-122015

- The tender document has to be viewed/ downloaded from above specified websites. Bidders are advised to visit above specified websites regularly for updates /Amendments/ Corrigendum, if any and not be published elsewhere. The Updates/Corrigendum/Addendum shall be followed up to submission of tender and it will be the part of tender.
- The purpose of this NIT is to provide interested parties with information to assist the preparation of their bid. While WAPCOS Limited has taken due care in the preparation of the information contained herein, and believe it to be complete and accurate, neither it nor any of its authorities or agencies nor any of its respective officers, employees, agents or advisors give any warranty or make any representations, expressed or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it. The Bidders must read all the terms and conditions of bidding document carefully and only submit the

bid, if eligible and in possession of all the documents required. Corrigendum while all efforts have been made to avoid errors in the drafting of the tender documents, the Bidder is advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained.

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

For and on behalf of WAPCOS LIMITED
Addl. Chief Engineer

SECTION– I

INSTRUCTIONS TO BIDDER

SECTION- I INSTRUCTIONS TO BIDDER

1.0 SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING

1.1 GENERAL

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

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

1.2 REGISTRATION

- a) 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 Enrollment” on the CPP Portal which is free of charge.
- b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- f) Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.

1.3 SEARCHING FOR TENDER DOCUMENTS

- a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- b) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

1.4 PREPARATION OF BIDS

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

1.5 SUBMISSION OF BIDS

- a) Please uninstall any Java version if installed already. Then go to this link <https://eprocure.gov.in/cppp/jre-windows-i586.exe> and download this prescribed version of java for this portal.
- b) 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.
- c) 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.
- d) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- e) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- f) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- g) 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 coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- h) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- i) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- j) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- k) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- l) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

2.0 INSTRUCTIONS TO BIDDER

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

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

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

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

The Bidder must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a bid and for entering into a contract, must examine the Drawings, must inspect the sites of the work, acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining

thereto. WAPCOS Limited will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

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

3.0 EARNEST MONEY DEPOSIT (EMD) / BID SECURITY

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

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

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

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

- i. After opening of Tender, revokes his tender within the validity period or increases his earlier quoted rates.
- ii. Does not commence the work within the period as per LOA/Contract. In case the LOA/Contract is silent in this regard then within 15 days after award of contract.

The Bid Security will be forfeited in the bidder

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

4.0 LANGUAGE OF BID

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

5.0 BIDDERS RESPONSIBILITY

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

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

6.0 PERIOD OF COMPLETION

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

7.0 AMENDMENT OF BID DOCUMENTS

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

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

8.0 BID VALIDITY PERIOD

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

9.0 CURRENCY OF BID

Bid prices shall be quoted in Indian Rupees.

SECTION– II

SELECTION AND QUALIFYING CRITERIA

SECTION-II

SELECTION AND QUALIFYING CRITERIA

1.0 SITE VISIT

- The intending bidder should have the knowledge about the site constraints as work is to be executed in the newly constructed Hospital building, which is being constructed by the other contractor and this Hospital Building is in final stage of completion. The intended bidder have to corporate with the team of existing contractor team and will not use facilities like water, electricity, equipment, manpower etc. of existing contractor. Hence, intended bidder is advised to quote their cost accordingly.
- The Intending Bidder(s) are advised to inspect and examine the sites at their own cost and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. 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 and any of its personnel or agents will be granted permission by the Employer/Owner to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder, its personnel, and agents will release and Indemnify the Employer/Owner and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

2.0 PRE-BID MEETING

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

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

3.0 QUALIFYING CRITERIA: ONLINE TECHNICAL BID SUBMISSION

The intending bidders should only submit bid if he considers himself eligible and will be Technically Qualified, if have all the Documents as mentioned below in Table-1: “Documents for Technical Qualification”.

Table-1 shall also be considered as “CHECK LIST” for submission of documents. **The bidder will upload all the required documents as per Table-1 on Online Portal and same shall be submitted Offline.**

The **“MANDATORY GUIDELINES”** for “Uploading of Technical Bids” and “Submission of Offline Bids” are as below:

a) UPLOADING OF TECHNICAL BIDS

- 1) Bidder will arrange & prepare the all required documents as per Table no.-1.
- 2) After that Bidder will arrange all these documents serial wise as per order given in Table-1 i.e. S.N: a) to q) below
- 3) After that bidder will put continuous page number (without any break) on each page.
- 4) These page numbers shall be mentioned by bidder in “Check List” against each required documents
- 5) This numbered check list prepared by bidder shall be put on top of arranged numbered documents as per above Sno.2.
- 6) After that Authorized representative of bidder shall Sign & Stamp on each page of these arranged numbered documents.
- 7) The numbered Check List along with required Qualifying Documents arranged as per above Sno-1 to 6 shall be scanned in coloured by bidder and will be uploaded Online for “Technical Evaluation”. If file size is increasing, these documents may be split in parts, however serial / order will be kept as per above Sno. 2 & 3 for ease of “Technical Evaluation”
- 8) **Note: There is no need to add any other additional documents apart from the documents asked in Table-1, as additional documents will not be considered during Technical Evaluation**

b) SUBMISSION OF OFFLINE BID

- 9) The proper binded, above Qualifying Documents arranged & page numbered by bidder along with Check List on top (as per above Sno. 1 to 6) with Signed & Stamped on Each Page shall be submitted in one (1) separate sealed envelope clearly labeled as “TECHNICAL BID” for the Work (Write Name of Work as mentioned in NIT) along with Details of Bidders Address, Phone, E-mail on Envelope.
- 10) **NOTE:-** The above offline documents shall be submitted by bidder on WAPCOS address as per date & time mentioned in NIT, otherwise bids will be rejected.

Note: If bidder does not follow the above Guidelines, then bid may be rejected by WAPCOS

Table -1: Documents for Technical Qualification		
CHECK LIST		
Name of Bidder	M/s.....	
Name of Work:	Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula	
S. N	Particular of Document	Page Nos. (from – to)
a)	<p>Authority to Sign the Tender</p> <p>c) In case of proprietary firm, the Proprietor shall sign with full name, current address OR by the authorized person holding Notarized Power of Attorney issued by the Proprietor for signing of business proposal. The Power of Attorney shall <u>be submitted in original and shall be specific to this Bid submission only and mentioning the name of the work/project</u></p> <p>d) In case of a Limited Company or Corporation, the Application shall be signed by an authorized person holding the Power of Attorney for signing of business proposal. A certified copy of the Power of Attorney shall accompany the Application.</p> <p>Note: Power of Attorney duly notarized and on a stamp paper of appropriate value, issued for signing the tender documents, make corrections/ modifications, to interact with the Employer and act as the contact person, shall be submitted along with Technical Bid.</p>	
b)	EMD Documents.	
c)	Demand Draft for Tender Fees	
d)	Letter of Transmittal For Technical Bid and Financial bid along with Declaration by the Bidder on bidder's original letter Head as per given format	
e)	<p>Bidder shall submit “Financial Information” regarding Turnover, Profit/Loss and Net Worth certificate for Last 5 (five) years ending on the financial year 2022-23 in Form-A duly certified by Statutory Auditor of the firm/company which must carry UDIN (Unique Document Identification Number).</p> <ul style="list-style-type: none"> • Profit / loss (after Tax): The Bidder should not have incurred any loss (profit after tax should be positive) in more than two years during last five years ending 2022-23. • Turnover: Average annual financial turnover of Bidder should be at least 50% of the estimated cost of work during the immediate last 3 consecutive financial years ending 2022-23 • Net Worth: Net worth of the Bidder should be positive during the last financial year 2022-23. The requisite certificates must be certified by statutory auditor of the firm/company. • Bidder shall attach Balance Sheet and Profit & loss Statement, duly audited by Statutory Auditor of the firm for last 5 (five) years ending on the financial year 2022-23 in support of Form-A <p>Note: This Certificate will be verified through ICAI Portal using UDIN number mentioned in Form-A</p>	

S. N	Particular of Document	Page Nos. (from – to)
	Note: There is no need to upload entire voluminous balance sheet. However, summarized balance sheet (Audited) and summarized Profit & Loss Account (Audited) for last 05 years shall be uploaded.	
f)	<p>Solvency Certificate The bidder contractor should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Bank Solvency Certificate issued from a Nationalized / Scheduled Commercial Bank approved by Reserve Bank of India (RBI) should be at least 40% of the estimated cost of the work. The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana <u>specific to this Bid submission only and mentioning the name of the work/project.</u> The certificate shall be submitted in original and the color / b&w copy / scanned copy shall not be accepted. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate in prescribed Form-B. Note: This Certificate will be verified from the issuing authority by WAPCOS</p>	
g)	<p>Completed Similar Work Criteria: The bidder should have satisfactorily completed the similar types of works as mentioned below during the last seven years ending previous day of last date of submission of tender.</p> <p>i) One similar completed work costing not less than 80% of the estimated cost of work.</p> <p style="text-align: center;">Or</p> <p>ii) Two similar completed works of order value each not less than 50% of the estimated cost of work.</p> <p style="text-align: center;">Or</p> <p>iii) Three similar completed works of order value not less than 40% of the estimated cost of work.</p> <p>Note: Similar work shall mean Supply, Installation, Testing and Commissioning of Modular Operation Theatres Equipment during last seven years The value of the work done declared is to be without GST / Taxes. For the works, where the Taxes or GST is not clearly defined, the value of works shall be considered as including GST and GST @12% shall be deducted for the works completed up to 31.12.2021 and GST @18% shall be deducted for the works completed after 01.01.2022 to establish the value of work done.</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>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</p>	

S. N	Particular of Document	Page Nos. (from – to)
	<p>authority, WAPCOS reserves the right to not consider for the award of works. For work experience of private sector, the completion certificates shall be supported with copies of corresponding TDS certificates. <u>In case of mismatch in value in TDS certificate & completion certificate, then value mentioned in TDS certificate will be considered during evaluation.</u></p> <p>The bidders submitting experience certificate for the works done in joint venture (JV)/consortium with other firms/companies, their proportionate experience to the extent of its share in the JV/consortium or work done by them shall only be allowed on submitting the valid proof of their share/ work done</p> <p>Note: The completion / experience/Performance certificates, along with the supporting documents, shall be got verified from the issuing authority / organizations prior to opening of Financial Bid</p>	
h)	<p>Verification of Solvency, Completion/Performance Certificates. Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form-C with undertaking. Bidder will ensure the email ids and landline are in working condition.</p> <p>If Solvency Certificate, completion/Performance certificate are not verified by the issuing authority, then it may not be considered for technical evaluation.</p>	
i)	<p>GST Registration & PAN: Bidder shall submit valid GST registration certificate for the state where work is to be executed and PAN Card. If not registered till date of submission of bid, bidder will give undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submitting of 1st bill of executed works.</p>	
j)	<p>Indian Registered Company: The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Firm/ Partnership Firm. Joint ventures are not accepted. Copy of Certificate of Incorporation/ Registration/ Partnership Deed Registration or any other relevant document, as applicable, should be submitted along with a copy of address proof.</p> <p>NOTE: Proprietor firms shall submit registration details or shall submit the copy of relevant page of Pass book for the Current Account in the name of Proprietor Firm.</p>	
k)	<p>Structure & Organization: The bidder will submit Name, address, details of the organization, Name(s) of the Owner/partners/promoters and Directors of the firm/ company as prescribed in Form-D.</p>	
l)	<p>Non - Conviction Certificate: The bidder will submit the undertaking regarding “Non –Conviction Certificate” as prescribed in Form-E.</p>	
m)	<p>No Deviation Certificate:</p>	

S. N	Particular of Document	Page Nos. (from – to)
	The bidder will submit ‘No Deviation Certificate’ as prescribed in Form-F.	
n)	Undertaking regarding Blacklisting / Non Debarment The bidder will submit the “Undertaking regarding Blacklisting / Non Debarment” as prescribed in Form-G.	
o)	Undertaking regarding Restriction under Rule 144(XI) of the General Finance Rules (GFRs) 2017 The bidder will submit the “Undertaking regarding Restriction under Rule 144(XI) of the General Finance Rules (GFRs) 2017” as prescribed in Form –H.	
p)	Preference to Make in India: The bidder shall submit undertaking indicating percentage of local content used during the execution of work as per the order of Public Procurement (Preference to Make in India) as prescribed in Form-I.	
q)	Understanding The Project Site The bidder will submit the “Understanding The Project Site” as prescribed in Form –J.	

Date:

(Signature, name and designation
of the Authorized signatory)

4.0 CONTENTS OF FINANCIAL BID

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

Quoted amount by the Bidder shall be firm during the performance of the Contract. Quoted amount by the Bidder with any condition shall not be accepted and same is liable to be rejected. Quoted amount by the Bidder shall include all Materials, Tools & Plant, labour, supervision, profit; other levies together with all general risks, liabilities and obligations set out or implied in the contract, applicable Labour Cess, cost of insurance to this contract, all applicable tax liabilities like Income Tax & Surcharges, etc. Any other taxes /cess as per Government directives shall be deducted from each bill paid to the Contractor, from time to time. GST shall be payable extra as per prevailing rates.

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

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

5.0 OPENING OF FINANCIAL BID

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

6.0 SIGNING OF THE CONTRACT

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

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

SECTION – III

FORMS

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

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**LETTER OF TRANSMITTAL FOR TECHNICAL BID**

To,
 Addl. Chief Engineer
 Construction Management Unit-II
 WAPCOS Limited,
 Sector- 18, Gurugram, Haryana-122015
Email: rd@wapcos.co.in
Contact No. +91124-2399830

Subject: Submission of Bids for Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

Sir,

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

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

SN	Name of work	Value of Work	Client

Date:

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

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

LETTER OF TRANSMITTAL FOR FINANCIAL BID

Dated:

To
Addl. Chief Engineer
Construction Management Unit-II
WAPCOS Limited,
Sector- 18, Gurugram, Haryana-122015
Email: rd@wapcos.co.in
Contact No. +91124-2399830

Sub: Financial Bid for the Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

Dear Sir,

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

1. The Cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
2. I / We shall keep this offer valid as period specified in the NIT.
3. I / We hereby submit our FINANCIAL BID and Offer Cost as filled in BoQ excel sheet "BoQ1" for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**DECLARATION BY THE BIDDER**

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

We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. We have carefully gone through each & every section of the tender document for the work Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

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

Certificate:

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

Date:

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

Place:

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR OF BIDDER]**FORM-A: FINANCIAL INFORMATION**

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

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:**

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK]

FORM- B: SOLVENCY CERTIFICATE

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

Name of Work: **Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula**

.....M/s.....(name of bidder &
address).....
.....
.....
.....
.....

(Signature for The Bank)

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**FORM-C: CORRESPONDENCE DETAILS OF ISSUING AUTHORITY****Solvency Certificate and Completion/Performance/Experience Certificate**

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

A. Solvency Certificate

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

B. Completion/Performance/Experience Certificate

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

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

Date:

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

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**FORM- D: STRUCTURE & ORGANISATION**

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

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

Date:

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

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-E: NO-CONVICTION CERTIFICATE

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

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

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

Date:

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

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-F: NO DEVIATION CERTIFICATE

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

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

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

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

Date:

Place:

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

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-G: UNDERTAKING REGARDING BLACKLISTING / NON DEBARMENT

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Ltd. Further, we hereby Confirm and declare that we, M/s_____ , is not blacklisted/De-registered/debarred by any Government Department/Public Sector Undertaking under the Ministry of Jal Shakti and Ministry of AYUSH .

Date:

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

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

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

**Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for
National Institute of Ayurveda (NIA), Panchkula**

I / we(Name of the Firm)
well aware about the Restrictions under RULE 144 (XI) In General Financial Rules (GFR), 2017 on
procurement from country which shares a land border with India.. I/ we hereby certify that we are eligible
to participate in the tender as per Rule 144 (xi) In The General Financial Rules (GFR), 2017

Date:

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

Place:

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

FORM-I: UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for
National Institute of Ayurveda (NIA), Panchkula

We..... (Name of Firm)
hereby confirm that we will follow the Make in India Policy and its Guidelines at the time of
execution of subjected work. We have understood the provisions of Public Procurement
(Preference to make in India) Local content Policy and will achieve the minimum local content
target of 50%.

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

Place:

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

FORM-J: UNDERSTANDING THE PROJECT SITE

Name of Work: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula

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

- Availability of site in the newly constructed Hospital Building at National Institute of Ayurveda (NIA), panchkula for the execution of work.
- Availability of all construction material required for the execution of work.
- Sources from where electric connection is to be taken by contractor at the time of mobilization or other arrangements for electricity is to be made.
- Sources from where suitable water for construction is to be arranged.
- Location of local electrical supply line and other relevant services
- Hindrances / dispute, if any, which may arise during the execution of work

We have the knowledge about the site constraints as work is to be executed in the newly constructed Hospital building, which is being constructed by the other contractor and Hospital Building is in final stage of completion.

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

Date:

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

Place:

SECTION – IV

GENERAL CONDITIONS OF CONTRACT

SECTION – IV**GENERAL CONDITIONS TO CONTRACT****1.0 GENERAL RULES AND DIRECTIONS**

General Rules & Directions	1.	<p>The work proposed for execution by contract will be notified in a form of invitation to tender by publication in website.</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 Security 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 Partnership firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power of Attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.</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>
Applicable for Items Rate tender only	4.	<p>The rate(s) must be quoted in decimal coinage. Total Amount must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa 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 online offer (through limited tender process) quoting rate/ cost of work of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.</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 in presence of WAPCOS 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 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</p>

		<p>offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors.</p> <p>Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work</p>
Applicable for Percentage Rate/ EPC tender only	4A	<p>In case of Percentage Rate /EPC Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities , he will be willing to execute the work. The tender submitted shall be treated as invalid if :-</p> <ol style="list-style-type: none"> 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender. 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender. <p>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.</p>
	4B	<p>In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered amount or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.</p> <p>In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.</p> <p>If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence WAPCOS & the lowest contractors those have quoted equal amount of their tenders.</p> <p>In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor, whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.</p>
	5.	<p>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</p>

		of identification sign copies of the specifications and other documents. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
	6.	The officer Inviting Tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender
	7.	The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
Applicable for Items Rate tender only	8.	<p>In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.</p> <p>However, if a tenderer quotes nil rates against each item in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer and earnest money deposited shall be forfeited.</p>
Applicable for Percentage Rate /EPC tender only	9.	In case of Percentage Rate / EPC Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy
Applicable for Percentage Rate EPC tender only	10.	In Percentage Rate /EPC Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P' and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.
	11.	<p>i. The Contractor, whose tender is accepted, will be required to furnish Performance Security of 5% of the Tendered Value. This Security shall be in the form of cash (in case Security amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case Security amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in the with the prescribed form.</p>

		<p>ii. The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the value of each Running & Final bill. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed</p>
	12.	On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
	13.	GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same.
	14.	The contractor shall give a list of WAPCOS employees related to him.
	15.	The tender for composite work includes, in addition to Modular OT work and all other allied works.

2.0 CONDITIONS OF CONTRACT

Definitions	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.
	2.	<p>In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-</p> <ul style="list-style-type: none"> i. “Employer” shall mean WAPCOS Limited/ WAPCOS, A Government of India undertaking- Ministry of Jal Shakti, for execution of the Work / Project as mentioned in NIT, having their Registered office at 5th floor, Kailash building, 26-Kasturba Gandhi Marg, New Delhi-110001, India & include Engineer-in-charge, Project Manager, their successors & permitted assigns as well as their authorized officer / representatives. WAPCOS Limited is a company registered under the Indian Company Act 1956, with its registered office at New Delhi or its Administrative officers or its Engineer or other employees authorized to deal with any matter with which these persons are concerned and authorized on its behalf. ii. “Principal Employer/Owner” National Institute of Ayurveda (NIA), Jaipur, Ministry of AYUSH, Govt. of India who has appointed WAPCOS Ltd. as Project Management Consultant for the work mentioned in NIT. iii. “Bidder/Tenderer/Contractor/Supplier” shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company who are participating in Bidding process and will Execute the project after award of the Works as Contractor/Supplier. They should be an Indian Registered Company under Companies Act 1956/ 2013, Proprietorship Firm/ Partnership Firm iv. “Work or Project” means as mentioned in NIT. v. “Site and location” means the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract as mentioned in NIT. vi. “Engineer-in-Charge” means the Officer appointed by WAPCOS who shall direct, supervise and sign the Contract Agreement on behalf of WAPCOS, for the purpose of Contract or his duly authorized representative. vii. “Project Manager, WAPCOS” shall mean the officer appointed by WAPCOS to supervise the works at site on behalf of WAPCOS and Authorized by the Engineer-in charge.

		<p>viii. Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Engineer-in-charge or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.</p> <p>ix. "Market Rate" shall be the rate as checked & verified by the Project Manager, WAPCOS and agreed by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Special Conditions of Contract to cover, all overheads and profits.</p> <p>x. "Schedule(s)" referred to in these conditions shall mean the relevant schedule(s), standard Schedule of Rates of the government mentioned in Special Conditions of Contract.</p> <p>xi. "Consultant" means any consultant nominated by the WAPCOS</p> <p>xii. "Tendered Amount" means the value as quoted by the Bidder during bidding process excluding GST.</p> <p>xiii. "Tendered Value" means the value of work as stipulated in the letter of award excluding GST.</p> <p>xiv. "Contract Price" means the value of work executed under the Contract including tendered value, cost of extra items, cost of substituted items, cost of deviated items, works executed under the Contract including GST.</p> <p>xv. "Date of Commencement of Work" The date of commencement of work shall be the date of start as specified in Letter of Award or the first date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document.</p> <p>xvi. GST means Goods & Service tax- Central, State and Inter State</p>
Scope and Performance	3.	Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
	4.	Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
	5.	The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
Works to be carried out	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.
Sufficiency of Tender	7.	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the cost quoted in the Schedule of Quantities/ Building Components, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
Discrepancies and Adjustment of Errors	8.	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
	8.1	In the case of discrepancy between the schedule of Quantities/Building Components, the Specifications and/ or the Drawings, the following order of preference shall be observed:- i. Description of Schedule of Quantities/ Building Components. ii. Particular Specification and Special Condition, if any. iii. Drawings. iv. Standard Specifications. v. Indian Standard Specifications of B.I.S.
	8.2	If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
	8.3	Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
Signing of Contract	9.	<p>The letter of Award will be issued to the successful bidder by WAPCOS which will be duly signed & stamped by the successful bidder as token of unequivocal acceptance and confirmation. Subsequently, successful bidder will submit the Performance Security of required value within time specified in Tender document. Thereafter, on a date and time mutually agreed upon, the successful Bidder or his authorized representative shall attend the office for signing of the Contract Agreement.</p> <p>The contract Agreement consisting of complete Tender Document along with all the documents Corrigendum/Amendments if any, Clarifications / Correspondences and any other documents as forming part of the contract. No payment for the work done will be made unless contract is signed by the contractor.</p> <p>Failure on the part of the successful Bidder to comply with the above requirements will constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security.</p>

2.0 CLAUSES OF CONTRACT

CLAUSE 1: PERFORMANCE SECURITY

- i. The contractor shall submit an irrevocable **Performance Security of 5% (Five percent) of the “Tendered Value”** in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Special Conditions of Contract from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in Special Conditions of Contract on written request of the contractor stating the reason for delays in procuring the Performance Security, to the satisfaction of the Engineer-in-Charge. This Security shall be in the form of Cash (in case Security amount is less than Rs. 10,000/-) or Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case Security amount is less than Rs. 1,00,000/-) or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the WAPCOS as part of the performance Security and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the WAPCOS to make good the deficit.
- ii. **The Performance Security shall be initially valid up to period of 60 (sixty) days beyond the date of completion of all contractual obligations of the contractor, including Defect Liability Period (DLP) plus 1 year claim period beyond that.** In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Security extended to cover such enlarged time. The performance Security shall be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including completion of the Defect Liability Period.
- iii. The Engineer-in-Charge shall make a claim under the performance Security except for amounts to which the WAPCOS is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- iv. Failure by the contractor to extend the validity of the Performance Security as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Security.
 - a) Failure by the contractor to pay WAPCOS any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- v. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance Security shall stand forfeited in full and shall be absolutely at the disposal of the WAPCOS.

CLAUSE 1A: SECURITY DEPOSIT / RETENTION MONEY

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

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

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

If the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under purview of the Contract on account of such breach, pay compensation for delay

i.e. Liquidity Damage, a sum not less than 0.5% (Zero point five percent) of the Tendered Value as aforesaid for each week and limited to 10% of the Contract Price. If, still work is not completed by the Contractor after deduction of full Liquidity Damage i.e. 10% of the Contract Price, then Performance Security shall be invoked and deducted security money shall be forfeited and project will be terminated. After that the balance work will be executed by Employer on risk and cost (amount received from invocation of Performance Security and Security deposit) of contractor.

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

CLAUSE 3: WHEN CONTRACT CAN BE DETERMINED

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

- i. If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iii. If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Engineer-in-charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer-in-Charge the contractor will be unable to complete the same or does not complete the same within the period specified.
- iv. If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- v. If the contractor shall offer or give or agree to give to any person in WAPCOS service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for WAPCOS.
- vi. If the contractor shall enter into a contract with WAPCOS in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
- vii. If the contractor had secured the contract with WAPCOS as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- viii. If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for

- the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
- ix. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
 - x. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
 - xi. If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the WAPCOS shall have powers:
 - (a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, Security Deposit already recovered, Security deposit payable and Performance Security under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
 - (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work. In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

Note:

Actions under Clause 2 and 3 are independent.

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

CLAUSE 3A

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

- a) Tendered value of work is up to Rs. 1.0 Crore

15 days

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

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

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

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

CLAUSE 5: TIME AND EXTENSION FOR DELAY

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

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

In case of non-submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.

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

The contractor shall submit the Time and Progress Chart and Progress Report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery of Rs. 2500/- per day basis in case of delay in submission of Time and Progress Chart and Rs. 1000/- per day in case of delay in submission of the monthly progress report.

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

- (i) force majeure, or
- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (v) delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in executing work not forming part of the Contract, or
- (vi) any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the authority, but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Employer/ Principal Employer to proceed with the works. The Employer will give the "Extension of Time" only after the approval of the same from Principal Employer.

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

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

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

5.3 In case the work is hindered by the Employer/ Principal Employer for any reason / event, the Engineer-in-Charge, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub-clause and sub-clause 5.2 to the extent the delay is covered under sub-clause 5.2 the Contractor shall be entitled to only extension of time and no compensation/damages.

5.4 Request for rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the Engineer-in-Charge. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the Contractor shall produce a revised programme which shall

include all details of pending drawings and decisions required to complete the contract and also the target dates by which these details should be available without causing any delay in execution of the work. An amount as deemed appropriate by the Engineer-in-Charge shall be deducted on per day basis in case of delay in submission of the revised programme.

5.4.1 In any such case the Engineer-in-Charge may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. Engineer-in-Charge shall finalize/ reschedule a particular mile stone before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the Contractor for extension of time Engineer-in-Charge after affording opportunity to the Contractor, may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event.

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

CLAUSE 6 : COMPUTERIZED MEASUREMENT BOOK

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

All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the WAPCOS so that a complete record is obtained of all the items of works performed under the contract. All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Project Manager, WAPCOS as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Project Manager, WAPCOS, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Project Manager, WAPCOS, for the dated signatures by the Project Manager, WAPCOS, and the contractor or their representatives in token of their acceptance.

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

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

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

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

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

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

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

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

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

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

Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the Contractor is considered entitled by way of interim payment at such rates as decided by Engineer-in-Charge. The amount shall be paid by 45 working days after the day of presentation of the corrected bill by the Contractor to the Engineer-in-Charge or his representative, or 45 days after receive of the payments from Principal Employer whichever is later. As Bidder/Contractor acknowledges that under the present Contract agreement, the Employer is only working as intermediary between Principal Employer and Contractor. Thus, the Contractor unconditionally acknowledge that the payments under the present Contract shall be made proportionately by the Employer only on back-to-back basis i.e., after 45 days subject to receipt of payment from Principal Employer. The Contractor also unconditionally

agree that in the event the payment or part thereof, under the present Contract is not received from Principal Employer, then WAPCOS and/or any of its Employee/Officer shall not be responsible to pay any amount to Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

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

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

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

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

CLAUSE 8: COMPLETION CERTIFICATE AND COMPLETION PLANS

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge or his representative shall inspect the work with Project Manager, WAPCOS and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall 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.

Employer shall issue the completion certificate to the Contractor after successful handing/taking over by Principal Employer. Contractor as per format given in the section of Annexures shall only issue the completion certificate after the submission of "No Claim Certificate".

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

The contractor shall submit completion plans for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work, provided that the service plans having been issued for execution, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans. The "As Built" Drawings and completion report shall be submitted by the Contractor within 10 days from the date of completion works in 3 sets.

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

CLAUSE 9 : PAYMENT OF FINAL BILL

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

CLAUSE 10A: MATERIALS TO BE PROVIDED BY CONTRACTOR

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

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

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

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

materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

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

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

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

CLAUSE 10B :

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

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

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

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

(ii) MOBILISATION ADVANCE

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

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

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

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

(iii) INTEREST & RECOVERY OF MOBILISATION ADVANCE

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

Before any installment of advance is released, the contractor shall execute a one single Bank Guarantee Bond from Scheduled Bank for the amount equal to 110% of the amount of mobilization advance and valid up to stipulated period of completion as mentioned in NIT. This (Bank Guarantee from Scheduled Bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first 10% of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time 80% of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment. Along with aforesaid condition of recovery of mobilization advance, if contractor wants to recover more or full mobilization advance from the interim bills, then accordingly mobilization advance may be recovered by Employer. The said request will be given by the contractor along with the interim bill to the Engineer-In-Charge. The Bank Guarantee will be returned after recovery of the mobilization advance against particular Bank guarantee.

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

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

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

CLAUSE 10D : DISMANTLED MATERIAL PROPERTY

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

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

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

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

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

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

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

CLAUSE 12 : DEVIATIONS / VARIATIONS EXTENT AND PRICING

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

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the Tendered Value sum being ordered, be extended, if requested by the contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original Tendered Value plus
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 Deviations, Extra Items, Substituted item and Pricing

- (a) **In the case of extra item(s)** (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Project Manager, WAPCOS shall within prescribed time limit of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined after approval of Engineer-in -charge.
- (b) **In the case of substituted items** (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para.
 - If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
 - If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- (c) **In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Special Conditions of Contract**, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Project Manager, WAPCOS shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined after approval of Engineer-in -charge.

The prescribed time limit for finalizing rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items is within 10 days after submission of proposal by the contractor without observation of the Engineer-in-Charge or his authorized representative.

- 12.3** Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

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

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

foreclosure of the whole or part of the works.

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

- (i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- (ii) Employer shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work). For materials taken over or to be taken over by WAPCOS, cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- (iii) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.

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

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

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

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

If contractor:

- (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.
- (iii) The Engineer-in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to

WAPCOS, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

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

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

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

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

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

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the 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 16 : ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS

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

If it shall appear to the Engineer-in-charge or his authorized subordinates incharge of the work or to the Engineer-in-charge of Quality Assurance or Project Manager, WAPCOS or his subordinate officers or the officers of the organization engaged by the WAPCOS for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the

case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

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

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

The Warranty (on site)/Defect Liability Period and Annual Maintenance Period shall be 24 (Twenty Four) Months.

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

The Warranty/Defect Liability Period shall commence from the date of issue of the Taking Over Certificate by Principal Employer or issue of Completion Certificate by Principal Employer or agreed date of start of Defect Liability Period by the Principal Employer whichever is later. The Warranty period of equipments/items shall be provided as per the manufacturer norms or upto end of Defect liability period whichever is more. When the equipment is under Warranty/Defect Liability Period, it shall be the sole responsibility of the Contractor/Supplier to rectify defect of equipment, spare parts, replacement equipment as deemed necessary by the Employer/Owner and install the same without any cost implications to Employer/ Owner.

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

Contractor shall take required works / rectification of defects immediately after receiving of complaints from Principal Employer / Employer. If Contractor fails to attend the complaints within the given time

frame by Engineer-in-charge, then any expenditure incurred by WAPCOS in completing works / rectification of defects shall be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

CLAUSE 18: CONTRACTOR SUPPLY TOOLS & PLANTS ETC.

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

CLAUSE 18A : RECOVERY OF COMPENSATION PAID TO WORKMEN

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

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

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, WAPCOS is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, WAPCOS will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the WAPCOS under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, WAPCOS shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by WAPCOS to the contractor whether under this contract or otherwise WAPCOS shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act,

except on the written request of the contractor and upon his giving to the WAPCOS full security for all costs for which WAPCOS might become liable in contesting such claim.

CLAUSE 19 : LABOUR LAWS TO BE COMPLIED BY CONTRACTOR

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

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

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

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

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

CLAUSE 19A

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

CLAUSE 19B : PAYMENT OF WAGES

- i. The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii. The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- iii. In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Contractor's Labour Regulations made by WAPCOS from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- iv. (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.

- (b) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.

In the case of Union Territory of Delhi, however, as the all inclusive minimum daily wages fixed under Notification of the Delhi Administration No.F.12(162)MWO/DAB/ 43884-91, dated 31-12-1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise.

- v. The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.
- vi. The contractor shall indemnify and keep indemnified WAPCOS against payments to be made under and for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- vii. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- viii. Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- ix. The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19C

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

CLAUSE 19 D

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

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

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

CLAUSE 19 E

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

CLAUSE 19 F

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

1. **Leave :**
 - (i) in the case of delivery - maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day,
 - (ii) in the case of miscarriage - upto 3 weeks from the date of miscarriage.
2. **Pay :**
 - (i) in the case of delivery - leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater.
 - (ii) in the case of miscarriage - leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage.
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 as shown in Appendix -I and II, and the same shall be kept at the place of work.

CLAUSE 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the WAPCOS, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.500/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.500/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice.

If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their 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 19 I

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

CLAUSE 19K : Employment of Skilled / Semi Skilled Workers

The contractor shall, at all stages of work, deploy skilled/semi skilled tradesmen who are qualified and possess certificate in particular trade from Industrial Training Institute/National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer-in-charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs. 100 per such tradesman per day. Decision of Engineer-in-charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

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

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

For works costing more than Rs. 50 Crores, the Contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 30% of the unskilled worker engaged in the project in co-ordination with the Employer & National Skill Development Corporation (NSDC) for

certification at the level of skilled/semi-skilled tradesmen. The cost of such training as stated above shall be borne by the Government. The necessary space and workers shall be provided by the Contractor and no claim what so ever shall be entertained.

CLAUSE 20 : MINIMUM WAGES ACT TO BE COMPLIED WITH

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

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

The contract shall not be assigned or sublet without the written approval of the Engineer-in Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of WAPCOS in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the WAPCOS shall have power to adopt the course specified in Clause 3 hereof in the interest of WAPCOS and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

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

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

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an Proprietor Firm, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24: LIFE CYCLE COST

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

CLAUSE 25 : SETTLEMENT OF DISPUTES & ARBITRATION

25.1 Settlement of Disputes

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

- I. If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request Engineer-in-Charge in writing for written instruction or decision. Thereupon, the Engineer-in-Charge shall give his written instructions or decision within a period of one month from the receipt of the Contractor's letter.
- II. In case the Contractor is not satisfied with the decision of Engineer-in-Charge, he may proceed for arbitration as detailed in Clause 25.2 hereinafter.
- III. It is a term of Contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.
- IV. Performance of this Agreement/ Contract shall continue during arbitration proceedings or any other dispute resolution mechanism pursuant to Clause 25.2. No payment due or payable by the Employer shall be withheld on account of pending reference to the arbitration or other dispute resolution mechanism except to the extent that such payment of dispute.

25.2 Arbitration

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

- a. Firstly, the aggrieved party shall write a letter to the other party detailing its grievances and calling upon the other party to amicably resolve the dispute by convening a joint meeting. Accordingly, the parties as per their convenience shall jointly convene the said meeting(s), wherein minutes of the said meeting(s) shall be prepared and countersigned by all the parties. It is mandatory to prepare minutes of meeting(s) and to be countersigned by all the parties, irrespective of the outcome of the said meeting(s).
- b. In the event the parties are unable to reach on any settlement in the said meeting(s), then the aggrieved party shall mandatorily resort to pre-litigation mediation mechanism with Delhi High Court Mediation Cell, New Delhi.
- c. It is only upon failure of the pre-litigation mediation mechanism with Delhi High Court Mediation Cell, then the aggrieved party shall resort to resolution of disputes through arbitration of a Sole Arbitrator. The appointing authority of Sole Arbitrator is CMD, WAPCOS Limited, to which neither of the parties have any objection nor they shall ever object.
- d. Subject to the parties agreeing otherwise, the Arbitration proceedings shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 (amended as on date).
- e. It is also acknowledged and accepted that the Employer is only working as intermediary between the Contractor/Supplier and the Principal Employer/Owner, thus in the event, any dispute arises under the present agreement and referred to Arbitration for adjudication, then subject to corresponding clause in the Contract between Principal Employer/Owner & the Employer,

Principal Employer/Owner shall also be made party to the said Arbitration proceedings. Also, the award including costs if any passed against the Employer and costs incurred in the proceedings shall be the sole responsibility of Principal Employer/Owner. The said clause if found inapplicable, even then the other terms of the Arbitration Clause shall survive and shall be acted upon.

- f. The place/seat of arbitration shall be Delhi and any award whether interim or final, shall be made, and shall be deemed for all purposes between the parties to be made, in Delhi. The arbitral procedure shall be conducted in English language and any award or awards shall be rendered in English. The procedural law of the arbitration shall be Indian Law. The award of the arbitrator shall be final and conclusive and binding upon the Parties.
- g. The Contract and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of India and the Parties submit to sole & exclusive jurisdiction of courts at Delhi.”

25.3 English Language

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

25.4 Performance during Arbitration

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

25.5 No arbitration for decision on sub-standard work

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

CLAUSE 26 : CONTRACTOR INDEMNIFY EMPLOYER AGAINST PATENT RIGHTS

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

CLAUSE 27 : 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 finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-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) Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for WAPCOS to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by WAPCOS to the contractor, without any interest thereon whatsoever.

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

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

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

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

CLAUSE 30 : WATER FOR WORKS

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

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

CLAUSE 30A : ALTERNATE WATER ARRANGEMENTS

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

CLAUSE 31 : HIRE OF PLANT & MACHINERY

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

CLAUSE 32 : EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES

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

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising

the work. Even of the contractor (or partner(s) in case of firm/ company) is himself / herself an Engineers, it is necessary on the part of the contractor to Employ principal technical representative / technical representative (s).

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

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

CLAUSE 33 : LEVY/TAXES PAYABLE BY CONTRACTOR

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

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Employer and does not any time become payable by the Contractor to the State Government, Local authorities in respect of any material used by the Contractor in the works, then in such a case, it shall be lawful to the Employer and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

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

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

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

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

CLAUSE 35 : TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

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

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

The contractor shall not be permitted to tender for works in the WAPCOS responsible for award and execution of contracts in which his near relative is posted in WAPCOS. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the WAPCOS. Any breach of this condition by the contractor would render him liable to be debarred from tendering in WAPCOS any breach of this condition.

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

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

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

CLAUSE 38 : THEORETICAL CONSUMPTION OF MATERIAL- NOT APPLICABLE**CLAUSE 39 : COMPENSATION DURING WARLIKE SITUATION**

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the Contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the Contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the Contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed the Engineer-in-Charge upto Rs. 2,00,000/- and by the next higher officer concerned for a higher amount. The Contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the Contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this Contract.

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

In the event of the Contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-Charge.

CLAUSE 40 : APPRENTICES ACT PROVISIONS TO BE COMPLIED WITH

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

CLAUSE 41 : RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE

Release of Security Deposit of the work shall not be refunded if any complaint from labour / labour department against the contractor deployed at site for execution of works. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge.

CLAUSE 42: INSURANCE**1. Requirements**

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

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

2. Policy in Joint Names of Contractor and Employer

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

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

3. Third Party Insurance

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

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

CLAUSE 43 : PREFERENCE TO MAKE IN INDIA

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

Verification of Local Content

- i. The bidder at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement of the tender. They shall also give details of the location(s) at which the local value addition is made.
- ii. In cases of procurement for a value in excess of Rs 10 Crores, the bidder shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

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

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. Bidder from a country which shares a land border with India" for the purpose of this Order means:-
 - a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An Indian (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
 - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- iii. The beneficial owner for the purpose of clause above will be as under:
 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural

- person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercise control through other means.
2. “Controlling ownership interest” means ownership of or entitlement to more than twenty- five per cent. Of shares or capital or profits of the company;
 3. “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 4. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 5. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone of together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profit of such association or body of individuals;
 6. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 7. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- iv. An Agent is a person employed to do any act for another, or to represent another in dealings with third person. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

SECTION- V

SPECIAL CONDITIONS OF CONTRACT

SECTION-V**SPECIAL CONDITIONS OF CONTRACT****1.0 SPECIAL CONDITIONS OF CONTRACT**

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

GENERAL RULES AND DIRECTIONS under GCC		
DEFINITIONS		
2 (ix)	Market Rate Percentage on cost of materials and labour to cover all overheads and profits	15%
2(x)	Schedule(s)	Delhi Schedule Rates - 2023 (for Civil & Fire Fighting works; Delhi Schedule Rates -2022 for E&M works

GCC Clause No.	Particular	Modified/ Added
Clause 1	Performance Security	<p>a) Within 10 (Ten) days of receipt of the Letter of Award, but not later than the date of the signing of the Agreement, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Tendered Value:</p> <ul style="list-style-type: none"> • a Bank Guarantee issued by a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) as per Annexure-I of Bid document; or • a deposit receipt of a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) in favour of WAPCOS Limited payable at Delhi/ Gurgaon. <p>The conditions for Additional Performance Security shall be same as are for 5% Performance Security mentioned at Clause 1 in Section of General Condition of Contract.</p> <p>b) The confirmation of the Bank Guarantee shall be sought from the issuing bank through Structured Financial Messaging System (SFMS), from our banker Indian Overseas Bank, NHB, Gurugram, Branch Code: 1935, IFSC code: IOBA0001935 and Beneficiary as WAPCOS Limited. This shall also be applicable in respect of confirmation of any extension of the Bank Guarantee as and when required.</p>

GCC Clause No.	Particular	Modified/ Added
Clause 10 B(iv)	Recovery of Mobilization advance	Applicable The mobilization advance shall be recovered @25% of the value of work done (excluding GST) from each running account bill till complete mobilization advance is recovered.
Clause 12	Deviations / Variations Extent and Pricing	
	Clause 12.1	Not applicable
	Clause 12.2(a)	<p>Modified as:</p> <ul style="list-style-type: none"> “In the case of extra item(s) (items that are completely new and not in the scope of works as per tender condition and non-scheduled item within Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works, the contractor shall submit proper analysis on the basis of the market rates as per the direction of Engineer-in –charge and shall be paid in accordance with rate approved by WAPCOS plus applicable Goods and Service Tax (GST). In case the extra item being the Scheduled Item [Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works.
	Clause 12.2(b)	<p>Modified as:</p> <ul style="list-style-type: none"> In this case of substituted item(s) being DSR item [Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works. In this case of substituted item(s) being Non DSR item [Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works, the contractor shall submit proper analysis on the basis of the market rates after direction engineer-in-charge / WAPCOS.
	Clause 12.2(c) Deviation Limit for all items of work	<p>100%</p> <ul style="list-style-type: none"> Modified as “In the case of deviated item(s) beyond the % mentioned above [non-scheduled item within Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works. The contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis on the basis of the market rates. Contractor shall be paid in accordance with rate approved by WAPCOS plus applicable Goods and Service Tax (GST) on work contract.

GCC Clause No.	Particular	Modified/ Added
		<ul style="list-style-type: none"> In this case of Deviated item being DSR item [Delhi Schedule Rates- 2023 for Civil & Fire Fighting works; DSR-2022 for E&M works.

2.0 ADDITIONAL CONDITIONS OF CONTRACT

2.1 Site Facilities

- The contractor shall provide fully equipped office for Engineer- in-charge/ site engineer/ Principal Employer along with facility of 24 hours electric and drinking water supply, sanitary facilities, one inspection vehicle, furniture and desktop computers of latest version along with printers and internet connection at construction site and any other miscellaneous requirement as directed by Engineer-in-charge for finalizing immediate technical solutions/decisions on the site, so that the work progress may not be hampered. 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 has to make own security arrangement. Contractor shall maintain upto date record of in & out of the material & labour / staff at the security gate of campus at its own expenses.
- The Contractor shall provide safety equipment to the Employers/officers (whenever required).
- Contractor shall deploy security/ watchmen for 24 hours on site at entire execution period and up to successful handing over of the project to the Principal Employer.
- Contractor shall properly cover up & protect all the work throughout the duration of work at his cost until successful handing over to the Principal Employer, particularly flooring, risers, mouldings, steps, terrace or special floor finishes (by a layer of 25 mm thick Plaster of Paris over Polyethylene sheet as approved by Engineer-in-Charge) staircases and balustrades, doors and glass, paint work, furniture and all finishing

2.2 Handing Over of the Project

Contractor shall provide necessary Statutory Approvals/NOCs/ License from all local Government/ Statuary Authorities if any required as per the standard norms, required before handing over the work to the Principal Employer.

Contractor will hand over the project to Employer/Principal Employer after successful completion of each component of the project along with submission of all the required documents i.e. As- built drawings, Inventory list, guarantee / warranty bonds, certificates & invoices of equipment, lock and key of each room etc.

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

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

Departments.

2.3 Co-operation & Co-ordination with other Agencies:

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

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

2.4 Inspection of the work by any Government Agency

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

2.5 Contractor's Storage and Site Office

The Contractor shall make own arrangement for storing his equipment, plant, materials etc. and no storage will be provided by WAPCOS. The Contractor be solely responsible for watching or guarding his property and materials. Contractor shall cover all materials at site with requisite insurance against theft, larceny, dacoits, fire tempest and flood.

2.6 Damage of existing hospital building

As mentioned in the tender, work is to be executed in already constructed hospital building by the other Civil Contractor. If any damage occur in the existing hospital building during transportation of material & equipment and execution of OT works, the same will be rectified/ replaced immediately by the bidder without any dispute as per the direction of Project Manager, WAPCOS.

SECTION – VI

ANNEXURES

ANNEXURE - I	FORMAT FOR CONTRACT AGREEMENT
ANNEXURE - II	FORMAT FOR PERFORMANCE BANK GUARANTEE
ANNEXURE - III	FORMAT FOR MOBILIZATION ADVANCE PAYMENT BANK GUARANTEE
ANNEXURE - IV	FORMAT FOR INDENTURE FOR SECURED ADVANCES
ANNEXURE - V	FORMAT OF BANK GUARANTEE FOR EMD
ANNEXURE - VI	FORMAT FOR SEEKING EXTENSION OF TIME
ANNEXURE – VII	FORMAT OF GUARANTEE BOND /AFFIDAVIT FOR WORKS
ANNEXURE – VIII	SAFETY CODES
ANNEXURE – IX	MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS
ANNEXURE – X	CONTRACTOR'S LABOUR REGULATIONS
ANNEXURE - XI	NO CLAIM CERTIFICATE

ANNEXURE-I

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

CONTRACT AGREEMENT

This Contract made on the ____ day of ____ 20____ between WAPCOS Limited, a Company in corporate under Indian Company’s Act and having its registered office at 5th floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called “WAPCOS” of the one part) and (Name of Contractor Firm & Address)_____ (hereinafter called “Contractor” of the other part).

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

NOW THIS AGREEMENT WITNESSETH as follows;

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

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

- a) Tender Document no. _____ dtd. _____
- b) Letter of Award to Contractor by WAPCOS
- c) Documents furnished by the Contractor during Bidding process
- d) Corrigendum/Amendments, if any
- e) Clarifications / Correspondences, if any
- f) Any other documents as forming part of the contract

1. The aforesaid documents shall be taken as complementary and mutually explanatory of one another.
2. In consideration of the payment to be made by WAPCOS to the Contractor as indicated in this Contract, the Contractor hereby covenants with WAPCOS to execute and complete the Works in conformity, in all respects, with the provisions of the Contract.
3. WAPCOS hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the contract at the time and in the manner prescribed by the Contract.

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

SIGNED, SEALED AND DELIVERED

For and on behalf of the WAPCOS

For and on behalf of the Contractor

NAME _____
Designation

NAME _____
Designation

in the presence of witness:

in the presence of Witness

1 _____

1 _____

2 _____

2 _____

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

Annexure – II**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR PERFORMANCE BANK GUARANTEE**

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

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 **Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula**, (hereinafter called "the contract") and the Contractor having agreed to provide a Contract Performance Security for the faithful performance of the entire contract equivalent to Rs. _____ (Rupees _____ only) (5% of the said value of the Contract to the Employer).

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 or court. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Employer and further agrees that the guarantee herein contained shall continue to be enforceable till the Employer discharges this guarantee.

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

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

or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank. The guarantee shall not be affected by a change in the constitution of the bank or of the employer.

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

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

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

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

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

Notwithstanding anything contained herein

- 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 month after validity of Guarantee)**

Dated this _____ day of _____ at New Delhi.

Authorized Signatory of Bank

Signature

Signature

Name.....

Name.....

Signature Code/ S.S no.

Signature Code/ S.S no.

.....

ANNEXURE – III**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR MOBILIZATION ADVANCE PAYMENT BANK GUARANTEE**

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

In consideration of WAPCOS LTD. (hereinafter referred to as “the Employer”) which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to _____ (Contractor’s name) with its Registered /Head Office at _____ (hereinafter referred to as “the Contractor” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer’s Notification of Award No. _____ dt. _____ and the same having been unequivocally accepted by the Contractor, resulting into 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-IV**(On non-judicial stamp paper of Rs. 100 duly attested by Notary / Magistrate)****FORMAT FOR INDENTURE FOR SECURED ADVANCES**

THIS INDENTURE made the..... day of20..... BETWEEN (hereinafter called the Contractor which expression shall where the context so admits or implies be deemed to include his executors administrators and assigns) of the one part and the WAPCOS (hereinafter called the WAPCOS which expression shall where the context so admits or implies be deemed to include his successors in office and assigns) of the other part.

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

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

with other materials of like quality or repair and make good the same as required by the Divisional Officer.

- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorised by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the WAPCOS of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the WAPCOS will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the WAPCOS shall immediately on the happening of such default be repayable by the Contractor to the WAPCOS together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the WAPCOS in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the WAPCOS to repay and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the WAPCOS of the said sum of Rupeesand any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the WAPCOS may at any time thereafter adopt all or any of the following courses as he may deem best :-
 - (a) Size and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay same to the WAPCOS on demand.
 - b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the WAPCOS under these presents and pay over the surplus (if any) to the Contractor.
 - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be finally resolved as per provisions of clause 25 of the contract.

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

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor

For and on behalf of the WAPCOS

NAME _____

NAME_____

Designation _____

Designation_____

in the presence of witness:

1 _____

2 _____

in the presence of Witness

1 _____

2 _____

ANNEXURE-V**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR BANK GUARANTEE OF EMD**

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

WHEREAS, M/s having their Registered/Head Office at (hereinafter called “the Bidder”) has submitted his Bid dated for the [hereinafter called “the Bid”] to M/s WAPCOS Limited (hereinafter called the Employer)

KNOW ALL PEOPLE by these presents that we (name of the Bank) having our head office at (hereinafter called “the Bank”) are bound unto Employer in the sum of for which payment well and truly to be made to the Employer, the Bank binds itself, its successors and assigns by these presents.

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

THE CONDITIONS of this obligation are:

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

OR

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

We undertake to pay to the up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Bidder will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above mentioned two conditions and specify the occurred condition or conditions.

This Guarantee will remain in force up to and including the date after the deadline for submission of Bids as is stated in the instructions to Bidders or as it may be extended by the notice of which extension(s) to the Bank is hereby waived and notice to the bidder would constitute sufficient notice to the Bank. Any demand in respect of this guarantee should reach the Bank not later than the above date.

Notwithstanding anything contained herein

- i) Liability under this guarantee shall not exceed
- ii) This bank guarantee shall be valid upto and;
- iii) Our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee only and only if you serve upon us a written claim or demand in terms of the guarantee on or before (indicate a period twelve months after the date of issue of Bank Guarantee).

Dated this _____ day of _____ at.....

Authorized Signatory of Bank

Signature

Signature

Name.....

Name.....

Signature Code/ S.S no.

Signature Code/ S.S no.

ANNEXURE-VI**(To be submitted on Contractor's original Letter Head)****FORMAT FOR SEEKING EXTENSION OF TIME**

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

Extension	Period	Reasons Stated earlier for seeking EoT
(a) 1 st extension		
(b) 2 nd extension		
(c) 3 rd extension		
(d) 4 th extension		
(e) 5 th extension		

9) Reasons for present extension

10) Period for which extension is applied for

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

Dated.....

Contractor's Signature and Stamp

Annexure – VII

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

FORMAT FOR GUARANTEE BONDS

To Be Executed by Contractor for, Removal of Defects 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, 5th floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called WAPCOS of the other part) for the Work **Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula** in respect of Contract Agreement (hereinafter called the “Original Agreement” signed between(Name of Contractor firm) and WAPCOS on..... dated), whereby the contractor inter alia, 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, manufacturing defects of materials etc.

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

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

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

IN WITNESS WHEREOF those presents have been executed by the GUARANTOR(Name and Designation who sign the Original Contract Agreement) on behalf of(Name of Contractor Firm) and WAPCOS on the day, month and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor

NAME _____

Designation _____

in the presence of witness:

1 _____

2 _____

For and on behalf of the WAPCOS

NAME _____

Designation _____

in the presence of Witness

1 _____

2 _____

ANNEXURE – VIII

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 upto 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 defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person
6.
 - (a) Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
 - (b) Safety Measures for digging bore holes:-

- i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
 - ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer-in-charge of the work;
 - 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 borewell, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
 - v. After the completion of the borewell, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - vi. After the borewell is drilled the entire site should be brought to the ground level.
7. Demolition - Before any demolition work is commenced and also during the progress of the work,
 - (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - (iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
 - (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - (iii) Those engaged in welding works shall be provided with welder's protective eyeshields.
 - (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - (v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to :-
 - (a) Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
 - (b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
 - (c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
 - (d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with

Oxygen kit.

- (e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- (f) The area should be barricaded or cordoned 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.

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

- (a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- (b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- (c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

9. The Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :

- (i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (v) Overall shall be worn by working painters during the whole of working period.
 - (vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man.
 - (viii) WAPCOS may require, when necessary medical examination of workers.
 - (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
- (i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - (ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - (iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be

necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

ANNEXURE – IX**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.
 - 1) Solution.
- (ii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iii) Nothing except the prescribed contents shall be kept in the First-aid box.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

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

5. WASHING FACILITIES

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

6. LATRINES AND URINALS

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

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

7. PROVISION OF SHELTER DURING REST

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

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

8. CRECHES

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

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

10. AMENDMENTS

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

ANNEXURE-X

Contractor's Labour Regulations

1. GENERAL

These Labour regulations shall be followed by the Contractor.

2. DEFINITIONS

- (i) Workman means any person employed by contractor directly or indirectly through a subcontractor with or without the knowledge of the WAPCOS to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person :-
 - (a) Who is employed mainly in a managerial or administrative capacity : or
 - (b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
 - (c) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the Employer/ Principal Employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the Employer/ Principal Employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.
 - (i) No person below the age of 14 years shall be employed to act as a workman.
 - (ii) Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
 - (iii) Contractors shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
 - (iv) Wages shall have the same meaning as defined in the Payment of Wages Act.
3. (i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
 - (ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
 - (iii) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
 - (iv) Where the minimum wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day,

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

4. **DISPLAY OF NOTICE REGARDING WAGES ETC.**

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

5. **PAYMENT OF WAGES**

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

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

- i) The wages of a worker shall be paid to him without any deduction of any kind except the following:-
 - a. Fines
 - b. Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.

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

7. LABOUR RECORDS

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

- vi) The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
- vii) The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII)
- viii) The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)

8. ATTENDANCE CARD-CUM-WAGE SLIP

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

9. EMPLOYMENT CARD

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

10. SERVICE CERTIFICATE

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

11. PRESERVATION OF LABOUR RECORDS

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

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

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

13. REPORT OF LABOUR OFFICER

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

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

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

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

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

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

16. INSPECTION OF BOOKS AND SLIPS

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

17. SUBMISSIONS OF RETURNS

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

18. AMENDMENTS

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

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

ANNEXURE – XI

NO CLAIM CERTIFICATE

Address to :

**The Engineer- in-Charge
WAPCOS Ltd.,**

Sub: Establishment of Modular Operation Theatres and allied Civil, MEP works for National Institute of Ayurveda (NIA), Panchkula. No Claim Certificate

Ref: 1. Work Order no.:-

2. Contract Agreement no.:-

Sir,

We have submitted -----nos. of bills including final bill total gross amounting for the subjected project of Rs. -----/- (Rupees ----- only).

However, following payment are due with Employer:

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

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

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

SECTION – VII

SCOPE OF WORK

SECTION-VII SCOPE OF WORK

1.0 INTRODUCTION

WAPCOS Limited, as Project Management Consultant on behalf of National Institute of Ayurveda (NIA), Jaipur, Ministry of AYUSH, Govt. of India, New Delhi invites percentage rate bid from interested Bidders for “ESTABLISHMENT OF MODULAR OPERATION THEATRES AND ALLIED CIVIL, MEP WORKS FOR NATIONAL INSTITUTE OF AYURVEDA (NIA), PANCHKULA”, herein after referred to as the Project /Work.

2.0 Scope of Work and Technical Specifications of work

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

Establishment Of Modular Operation Theatres And Allied Civil, MEP Works For National Institute Of Ayurveda (Nia), Panchkula, Haryana including any works in respect of civil, mechanical, electrical, plumbing works, assistance/input, supervision required for installation of equipment and associated facilities for proper function of the equipment.

The bidder shall execute the works as per the following technical specification for the execution of Major Modular Operation Theater (OT) works and Minor Modular OT.

TECHNICAL SPECIFICATIONS FOR MODULAR OPERATION THEATRES – MAJOR OT	
GENERAL	
A	The scope of work includes:
1	Supply, installation, testing and commissioning of all items including wall paneling & ceiling paneling, connected frame structures & substructure, OT doors, PVC flooring, Peripheral Lighting, Pendants, OT Light, Touch Screen Control Panel, Laminar flow, HVAC System, Storage shelves, Anesthesia Workstation as may be required for complete installation and trouble-free functioning of the operation theatres as part of the attached schedule of quantities, technical specifications & site conditions.
2	MGPS System: Medical Gas Pipeline up to individual OTs will be provided by the MGPS Contractor. However, Installation of Anesthesia/ Surgeons pendant shall be under the scope of the MOT tenderer. The bidder should ensure that all works carried out are to the recommendations of the Department of Health and Social Security's HTM 02- 01 /NFPA 99C / ISO 7396-1
B	General Conditions
1	The complete Modular OT works shall comply with all relevant safety and standards including NABH guidelines amended upto date.
2	The contractor is fully responsible for Installation and commissioning of all equipment mentioned in the tender.
3	Bidders are advised to visit the site for assessment before the submission of tender.

4	The Prefabricated modular construction should be designed and constructed for exact size, flexibility for the operating team, easy field installation and future disassembly, enlargement, or relocation. On approval of the designs submitted, the successful bidder shall provide complete all necessary works, install new hardware, software and implement services to complete the works all in accordance with standard practice and norms.
5	Materials used for the construction of Modular operation theatre shall be accompanied by test reports from a third party NABL accredited Lab. Test reports should be produced.
6	The Operation Theatre should be commissioned with the following test as per NABH guidelines
A	Temperature & Humidity test.
B	Air Particulate count.
C	Air Change rate calculation.
d	Air Velocity at outlet of terminal filtration unit/filters.
e	Pressure differential levels of the OT with respect to ambient/adjoining areas.
TECHNICAL SPECIFICATIONS	
C	WALL PANELING SYSTEM
1	Cladding structure shall consist of insulated stainless steel wall panels with total panel thickness between 50-60 mm. It shall be 0.8 mm thick, 304 grade stainless steel from the Front and back with 0.8 mm PPGI Sheet sandwich panel, with core consisting of rigid Polyurethane foam injected under high pressure with a minimum density of 40 kg/m ³
2	The individual wall panels shall use the tongue and groove/suitable technology for joining two panels. No welding shall be allowed
3	The panel should be pretreated with chemicals which ensure proper adhesion and are environmentally friendly. Necessary certificate should be provided
4	It shall have minimum number of junctions. The gaps between panels shall be suitably filled with metal filler/epoxy.
5	Anti-bacterial paint shall be coated on the wall. Wall elements shall be resistant to all standard cleaning agents, disinfectants and fumigation agents. Panels shall be covered with protective sheath to prevent scratch during installation.
D	CEILING PANELING SYSTEM
1	The prefabricated ceiling plates/cassettes shall be made up of sandwich panel front side SS 304 panels with sheet thickness of at least 0.8 mm and back side with PPGI Sheet of 0.8 mm with of PUF with minimum density 40kg/m ³ , matte finished and coated With antibacterial paint. It shall be from the same manufacturer as that of wall panel. Total thickness shall be 30-40mm.
E	Control Panels for Operation Theatre
1	The Surgeon Control Panel should meet Electrical Safety codes for High & Low voltage system, applicable to current standards.
	The Theatre Control Panel shall be designed to cope with changing technology and

2	equipment in operating environments. Control panel shall be user friendly and with ease of operating and maintenance. Control panel should have smooth flat surfaces for easy to wipe down.
3	The control panel should work as the central control panel for the HVAC controls, instruction board, and communication interfaces- both audio and video etc. It should be CE or UL listed.
4	The panel should be Touch screen type configured to incorporate all the services that Operation room staff requires. It shall be wall mounted.
5	All internal wires shall be marked with plastic ferrule type cable markers, for ease of identification. The Control Panel shall be designed for front access only.
6	The panel shall contain various displays and controls as below:
A	Time Day Clock - should be digital type and clocks having high brightness characters.
B	Time Elapse Day Clock - should be digital type and clocks having high brightness characters.
C	Temperature Indicator with controller - shall indicate the theatre temperature, which shall be connected to the local pressure switches of Air-Conditioning system. Indicator shall be of digital type with high brightness characters, not less than 30mm in height.
D	Humidity Indicator with controller - shall indicate the humidity inside the theatre which shall be connected to the local pressure switches of Air-Conditioning system. Indicator shall be of digital type with high brightness
E	General Lighting controls/ Indication – shall incorporate all the necessary controls of the lighting system (on / off and intensity control) inside the theatre. On/ Off and dimming controls organized in groups to provide uniform illumination. The control panel should also have control for Surgical light switch on off and intensity control.
F	Medical Gas Alarm System Indication – shall indicate High and Low gas pressure for each gas service present in the operating theatre and shall have an audible buzzer with mute facility. The medical gas alarms shall be connected to local pressure switches located downstream of the last isolation valves.
G	Hand Free Telephone – incorporated in the panel
H	HEPA filter efficiency – shall indicate the status of the HEPA filter fitted inside the plenum box in the OT.
I	Music system - connected with speakers of reputed brand
J	Manufacturer should have ISO 13485 and ISO 9000
F	Door and Frames (Hermetically Sealed Type) – Automatic- Sliding
1	Doors should be a hermetically sealed, single sliding door of size 2.1 (H) X 1.5 m (W) to maintain sterility and the correct air pressure in the room.
2	Doors should be manufactured of the highest quality High Pressure Laminate
3	Door's construction should properly fit with wall panels and should create a uniform system of the operating theater.
4	Doors should be made as sandwich-type – from two HPL Sheet, the space between them should be filled with particle board or PUF (cyclopentane mixing agent) or with so called honeycomb, glued to the plates. In installation places of hinges and locks, strengthening components must be used
5	Thickness of door wings should range in between 40 and 60mm.
6	Frames should be integrated into the panel system and should be prepared individually

	for each type of door.
7	Fixtures should be made of stainless steel and adapted to requirements – size and weight of door wings, shape of door handles prevents from hooking the aprons.
8	Automatic equipment for door should be provided by reliable manufacturers which should be European CE certified.
9	Operation of door should be realized through a wall board, elbow buttons or touch less buttons for operating room only.
10	Doors should be able to be equipped with door viewers, windows used for room observation.
G	OT Pendant – Single Arm Surgeons Pendant
1	Surgeons Pendent Systems should have the facility to provide convenient positioning of medical equipment, medical gas terminal units, electrical and specialty services in operation theatre.
2	The support arms should be extremely robust and revolve on high quality bearings, so that the pendant head glides smooth and quick to any desired position.
3	Each arm should be capable of 330 – 340 degrees of rotation and be fitted with stops which can be easily adjusted to suit the desired mode of operation.
4	It should be possible to replace all medical gas hoses without the need for onsite crimping of ferrules. All medical gas hoses shall be colour coded to as per standard.
5	The Pendant Service Heads / Column should be capable of accepting a range of shelves, drawers and infusion poles or other accessories. The Pendant Heads / column should support the range of Physiological Monitor Mounting Solutions.
6	Service head should design to host, Base, Gas Module, Electric Module, and shelves.
7	The Pendant Service Heads / column should be supplied with medical gas terminal units. The medical gas outlets fully comply with ISO 7396-1 and DIN 13260-2 standards.
8	Each surgeon's pendant should be Single Arm having multi movement with load carrying capacity of minimum 80 kg having following facilities.
A	Single movable Arm with total coverage of minimum 1000 mm and 330 degrees.
B	The Pendant Service Head/column should be modular with minimum 1000 mm head.
C	Gas outlets: O2 – 2 no, Vacuum – 1 no's, Air (4 Bar) – 1 no, Air (7 Bar) – 1 no, CO2 – 1 no.
D	Medical rail - 1 No.
E	Shelf – 2 nos. & shelf with drawer - 1 no.
F	IV Fluid Pole – 1No.
G	Electrical Sockets – 8 nos. 6/16 Amp. 6 pin sockets.
H	RJ 45 socket – 2 no
9	Pendants should comply with applicable standard.
A	Basic requirement of the medical device directive (MDD 93/42/EEC) (b) IEC 60601-1-2/medical electrical devices
B	European Norm ISO EN 11197 (special requirements for the safety of medical Supply units)
C	Pendent Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission
D	The terminal units must be according to ISO 7396-1 and DIN 13260-2 standards.
E	Medical gas hoses shall be compliant to ISO 5359:2009 color coded throughout its

	length.
H	OT Pendant – Motorized Lift Arm Anesthesia Pendant
1	Motorized Anesthesia Pendant Systems should have the facility to provide convenient positioning of medical equipment, medical gas terminal units, electrical and specialty services in operation theatre.
2	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.
3	Arm should be capable of 330 – 340 degrees of rotation and be fitted with stops which can be easily adjusted to suit the desired mode of operation.
4	Infinitely variable rotational stops should be available from 0-330 degree which shall enable precise of limits travel to be set to ensure maximum freedom of movement, whilst protecting walls and ancillary equipment.
5	It should be possible to replace all medical gas hoses without the need for onsite crimping of ferrules. All medical gas hoses shall be color coded to as per standard.
6	The Pendant Service Heads / Column should be capable of accepting a range of shelves, drawers, and infusion poles or other accessories. The Pendant Heads / column should support the range of Physiological Monitor Mounting Solutions.
7	Service head should design to host, Base, Gas Module, Electric Module, and shelves.
8	The Pendant Service Heads / column should be supplied with medical gas terminal units. The medical gas outlets fully comply with ISO 7396-1 and DIN 13260-2 standards. Medical gas hoses fully comply with the standard BS EN 739 and are provided with NIST connectors to this standard.
9	Each Anesthesia pendant should be Single arm Motorized Pendant with load carrying capacity of minimum 180 kg to hand a Anesthesia Machine on Pendant having following facilities.
A	Single movable Arm with total coverage of minimum 1000 mm and 330 degrees.
B	The Pendant Service Head/column should be modular with minimum 1000 mm head.
C	Gas outlets: O ₂ – 2 nos, N ₂ O – 1 no, Air (4 Bar) – 1 no, Vac – 2 no's, Venturi AGSS – 1 no.
D	Medical rail - 1 No.
E	Anesthesia Machine Mounted on Pendant
F	IV Fluid Pole – 1No.
G	Electrical Sockets – 10 nos. 6/16 Amp. 6 pin sockets.
H	RJ 45 socket – 2 no
10	Pendants should comply with applicable standard.
A	Basic requirement of the medical device directive (MDD 93/42/EEC) (b) IEC 60601-1-2/medical electrical Devices
B	European Norm ISO EN 11197 (special requirements for the safety of medical Supply units)
C	Pendent Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission
D	The terminal units must be according to ISO 7396-1 and DIN 13260-2 standards.
E	Medical gas hoses shall be compliant to ISO 5359:2009 color coded throughout its

	length.
I	Laminar Air Flow System – SS 304
1	The laminar flow should be designed to provide as key to preventing patients being infected during operation lies on the design of sterilized air conditioning system and the flow pattern of draught as well as the quality of engineering.
2	Laminar flow unit should guarantee filtered air supply with steady speed of approximately 0,23 m/s.
3	Installation of laminar flow unit should serve to prevent bacterial contamination, viruses and dust particles elimination.
4	The Laminar flow system should comprise of SS Frane and sealed gasket. The filters installed in the plenum should be suitable for application for laminar flow and clean rooms. These filters should meet following specification.
A	Separators: Continuous thermos plastic chord
B	Sealant: Polyurethane
C	Gasket: One piece polyurethane
D	MPPS average efficiency: >99.95%
e	3 Micron DOP efficiency:>99.99%
f	Final pressure drop: 600pa (max)
g	Max. Operating Temperature: 60 degrees Celsius
h	Max. RH: 40-60 %
5	The ceiling system should be equipped with “H 14” class HEPA filters position in the ceiling to achieve 0.23m/sec flow at the diffuser.
6	The filtration ceiling system should have diffuser/flow equalizer to achieve uniform & constant air distribution over the whole surface.
7	The air management system should be designed to achieve class 100 with the following parameters:
8	Bacteriological class =B (5 CFU/m ³)
9	Particle decontamination kinetics CP =5 min
10	The positive pressure should be maintained inside the OT to prevent contamination due to air from outside the OT.
J	AHU with Outdoor unit
1	<p>Air Handling Unit (AHU)</p> <p>Supply, Testing and Commissioning of Double Skin AHU (Air Handling Unit), with thermal breaker, with DX-Coil of 4000 CFM, consisting of fan section with DIDW centrifugal fan with 125mm WG static pressure. The AHU shall be made of extruded aluminum framework having plasticized G.I panels having injected 25mm PUF of 38 Kg/CUM density in between the drain pan of 16G aluminum in two layers having nitrile foam insulation in between. The extruded frame for motor and blower duly mounted with centrifugal backward curved blower along with electric motor, 10- micron rating washable pre filters and 5 micron rating washable fine filters, fire resistant flexible canvas connector, duct heater bank of strip heaters with geyser stat, humidistat. Inlet side twin column control dampers, actuator for CSD (ON / OFF type). DX coil section of 1/11 and 7/8, mixing box, mixing chamber with air VCD, 6 row deep DX cooling coil etc.</p> <p>DOUBLE SKIN CASING:</p>

Outer skin	0.6 mm Pre- coated GI
Inner Skin	0.6 mm Plain G.I
Framework	Thermal break Al. profile with thermal barrier.
Thickness of insulated panels / Cu.	25 mm Thick, CFC Free PUF injected (Density: 40 kg / Cu.
Unit Base	GSS base channel
DX COIL: (R-22)	
Coil Casing/Blank offs	GI
Material Of Tube	Copper
Tube Dia (mm / inch)	9.5 mm / 3/8" O.D.
Thickness of tube (SWG / mm)	30 SWG / 0.31 mm
Header Material	Copper
Thickness & Material of fins	0.15 mm Plain Aluminum
No. of Fins per inch (FPI)	11 / 12
FILTERS:	
Media of Filters	Synthetic (non-woven type).
Efficiency of Pre-filters (EU-4)	90 % down to 10 microns
Efficiency of Fine-filters (EU-5)	99 % down to 05 micron FAN &
AHU SHALL HAVE	
<ul style="list-style-type: none"> Mixing box with manually operated FA & RA damper in Al construction. Filter section with 50 mm thick (EU-4) box type pre filter. Coil section with 6 row deep DX- cooling coil with single distributor. Fan section with imported DIDW centrifugal backward curved fan, Drive set with V belt & Motor(EFF-2). Fine filter section with 305 mm thick (EU-5) flange type fine filter. Manually operated SA damper in Al construction. 	
11TR Outdoor unit	
OPERATING & PHYSICAL PARAMETERS: (Minimum requirement)	
Air Qty (CFM)	4000
SP (mm wg)	125
Fan Type	BC
Fan Dia	355
Fan RPM	2461
Fan Outlet Velocity (m/s)	9.24
Shaft Absorbing Power	3.23
DX Coil RD	6
AHUs	
<ul style="list-style-type: none"> AHUs should be CE certified for Electrical & Mechanical safety. AHUs should be certified in accordance to EN-1886-1998 Certifications. <ul style="list-style-type: none"> Mechanical Strength – Class 2A Casing Air Leakage – Class B Filter Bypass Leakage-Class F9 	

	<ul style="list-style-type: none"> ▪ Thermal Bridging –Class TB2 <p>Coils</p> <ul style="list-style-type: none"> ▪ All Coils should be AHRI certified as per test standard ARI-410. ▪ All coils should be UL certified for safety
K	Double Dome OT Light with Med view Camera
1	Should be a Surgical Light unit incorporating the latest LED technology shadow less operating light field with the following specifications
2	Should have high performance LEDs with lifetime more than 50,000 hours
3	Number of LEDS should be more than 90 in each Dome
4	Should be a dual dome and the main light and satellite should have the following specifications
5	LUX intensity 1,60,000 Lux & Satellite 1,60,000 Lux or above
6	Light Field diameter shall be above 24 cm and it should adjustable
7	Color rendering index should not be less than Ra 95, R9 93
8	Adjustable Color Temperature should be range of 3800 - 5,600 Kelvin
9	Intensity & Focus should be control from Sterilizable handle & Main Control.
10	Depth of illumination should not be less than 100 cm
11	Illumination adjustment 30% to 100%
12	The light dome shall be compatible for laminar air flow.
13	The LED's must be suitable for long term maintenance and ease of replacement
14	Dome should have facility to connect Wireless Camera
15	Wireless Camera for OT light dome
16	Should be High definition 1080p lines resolution Wi – Fi camera with optical zoom (min 30x optical zoom) and focus adjustment compatible to connect any domes in the OT Lights supplied
17	The camera control functions shall be either with remote control/ wall control panel/ dome/ arm
18	Should have provision to connect with a recording device or monitor kept inside or outside of the operation mtheater by means of wireless connectivity
15	Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission
L	Operating Theatre Integration System
1	<p>An integration system to integrate up to 2 medical sources simultaneously inside the Operating Theatre.</p> <p>Detailed Requirements</p> <ol style="list-style-type: none"> a. The OT Integration system should be able to connect to 2 (Two) surgical camera sources such as endoscopes, C-Arms, Microscopes, Surgical light cameras in a vendor-neutral manner. b. The integration software must provide the following functionality: <ol style="list-style-type: none"> a. Integrating up to 2 different sources at one time c. The entire system should be controllable through software. <ol style="list-style-type: none"> a. The main control system should be software driven and should be accessed via a 21" commercial grade monitor from inside the operating room. b. It should also be controlled via a silicon medical grade keyboard and mouse. c. The Management System's functions shall feature at least: <ol style="list-style-type: none"> i. The Software should be intuitive and easing the workflow in the OT.

	<ul style="list-style-type: none"> ii. Software should have an emergency state button enabling to start the procedure without the need of a logged-in user or selecting a patient. iii. System should support storage of any kind of guidelines, manuals and instructions that may be needed for easy access inside the OT. <p>d. Viewing: 55" commercial grade monitor mounted in-wall with an ingress protection which is IP54 compliant</p> <p>e. Recording of any 2 source simultaneously in FHD format.</p> <ul style="list-style-type: none"> a. The recording system must save all data under patient name / ID. b. It should have a fan less design. c. It should Capture Full HD images, video sequences and audio of any of the connected input sources. d. Recording of one imaging sources and capturing images in Full HD e. Resolution of still images should be 1920 x 1080. f. Resolution of Videos should be 1920 x 1080 with at least 50 frames/s in progressive. g. The recordings and snapshots must be stored on the hard-drive of the recording system for a period of 30 days and there must be auto-deletion of data after the expiry of retention period. h. Supported Picture Format: JPG, TIFF, PNG, BMP i. Export of images and videos shall happen in the background and shall not lock the system until the export is done. j. Ability to store videos and images locally, on Network or PACS/VNA. Included DICOM Interface <p>f. Live Streaming</p> <ul style="list-style-type: none"> a. User can select source to be live streamed. b. User can start live streaming via the recording software. c. User sees an "ON AIR" indication prominently on screen. d. User can pause / restart / stop streaming.
M	Operating List Board
1	One operating list board of minimum size of 1000 x 700 x 60 mm deep should be provided in each operating theatre.
2	It should be made of glass having Magnetic properties and should be flushed to the wall of the operating room.
N	Hatch Box / Pass Box
1	It should be made of SS 304 Grade
2	Size 600 X600X600 mm
O	X-Ray Viewing Screen
1	The theatre is to be equipped with a 2-plate X-Ray viewing screen.
2	The X-Ray viewing screen illumination should dimmable LED.
3	The equipment should have high level of control luminance, without flicker and should be installed flushed with the theatre wall for hygienic and ease of cleaning purpose.
4	LED Lamps should provide a uniform level of illumination across the entire front panel diffuser and should be controlled by electronic step-less dimming controls to provide flicker free dimming from maximum brightness to off.
5	Should have clipless mechanism to hold & secure the X-Ray negative film when in use.
P	Storage – SS 304
1	The storage Unit should be made from SS304 grade
2	Modular system of built-in operating theaters must enable possibility to install different

	types of cabinets based on customer requirements, which must be flushed into place behind wall panels.
3	Cabinets must be in same color shade or SS finish as wall panels and doors to achieve uniform look of operating theater
Q	PVC Flooring - Operation Theatre
1	It should be with 2mm anti-static seamless PVC flooring.
2	Floor should be smooth, non-slip, impervious material conductive enough to dissipate static electricity but not conductive enough to endanger personnel from electric shock. Conductivity reports should be furnished
3	Electrostatic charge dissipation combat PVC seamless flooring of very high quality should be provided.
4	Thickness not less than 2 mm. continuous roll should be used and joints should be welded by special PVC thermal welding units using PVC welding bars of same colour & compatible material to provide continuous sealed surface.
5	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. Method statements required before commencing works at site.
6	It should be inert to body fluids, chemicals and disinfectants. It should not be affected by temperature variation within the OT.
7	The floor should efficiently discharge electric charges up to 2 kV.
8	Flooring should be done by skilled workers of accredited agencies authorized by the supplier of PV sheets. The electrical resistance (point to ground) should be within 2.5×10^4 to 5×10^6 ohms. The floor should not allow build-up of electrical charge beyond 100 volts due to antistatic effect. The corners should not be terminated sharply and concealed cove- former (aluminium) should be used to overlap the wall panel to a height of approx. 100 mm and sealed perfectly and uniformly. Self-levelling compounds should be used.
9	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 every 150 sq.ft area and attaching it to the main earthing strip/ground.
10	copper grounding strips (0.05 mm thick, 50 mm width) should be laid flat on the floor in the conductive adhesive and connected to copper strip of grounding. The connection from copper grid should be brought out uniformly at places to form equipotential grid.
11	Flooring should be mechanically shock proof, scratch proof, flame retardant and anti-microbial.
12	Corners should be uniformly curved. Final surface should be non-corrosive to biological fluids and detergents.
13	Color should be uniform pleasant and matching with ambience and as approved by the client before supply is affected.
14	Suitable self-levelling should be done before PVC flooring to avoid undulation within the MOT. Method statements required before commencing works at site. Floor levels after PVC flooring should match with the external corridors of Operation Theatre.
15	The self-levelling compound shall be of the type that does not promote bacteriological growth, and should validate by test reports.
R	Peripheral Lights & Clean room luminaries

1	Lighting in the operating theater must be in accordance with European standard and World standards.
2	It should be fitted outside the air ceiling system area and flush with the ceiling in the operation theatre suitable to required illumination of OT.
3	Minimum required IP protection is 54 and intensity of lighting in operating theater should be min. 500 - 1000 lux. it should be minimum 6 in numbers for each OT.
4	The LED lamp of size 600 x 600 mm with optical antiglare system for adjustable light distribution.
5	The color temperature of the light should be 5700 - 6500 K
6	Color of visible parts of lighting fitting must be in accordance with color of ceiling cassettes. The intensity of lights should be controlled by electronic stabilizers.
S	Electrical Installations incl Distribution Box
1	All internal wiring should terminate in connectors with screw & clamp spring. Connections of the clip- on type mounted.
2	Individual fuses or miniature circuit breakers should protect all internal circuits. Complete schematic drawing with description should be enclosed with the equipment.
4	Power sockets within the Operating Theatres ancillary areas should be matched to those in the rest of the hospital.
5	Each wall of MOT should have minimum 02 Nos. 6/16A hybrid switch socket & 32A industrial socket at any two walls as per IEC standard.
6	All equipment should be fully and permanently labelled to identify and describe the function, operation and voltage of the apparatus concerned. Throughout and upon completion of the electrical installation, tests in accordance with relevant sections of the local wiring regulations should be carried out and the results recorded.
T	Pressure Relief Dampers
1	Pressure Relief Dampers should be provided in each room to prevent cross contamination of air from clean and dirty areas.
2	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 area.
3	Counterweight balancing system should be provided in the PRD to maintain positive pressure inside the operation room.
4	Air pressure stabilizers should have unique capability of controlling differential pressure to close tolerance. The PRD should remain closed at pressure below the set pressure and should open fully at pressure only fractionally above the threshold pressure.
5	The frame, body and blade should be of grade SS304 stainless steel. The body should be epoxy powder coated as per standard BS colours.
6	The PRD design shall be as per HTM 2025:1994 for ventilation in healthcare premises.
U	Internal HVAC Ducting
1	HVAC ducting shall be made of fabricated Aluminium duct with all fittings such as neoprene rubber gaskets, elbows, tee bends, special off-chutes, turning vanes, splitter dampers, insulated doors, transformation pieces, joining with easy slip on flange, gasket, corner piece, cleat, aluminium volume control dampers etc. as reqd. as per updated IS 655, SMACNA standards at site including suspension and supporting arrangement for plenums
V	ANAESTHESIA ELECTRONIC WORKSTATION
1	Anesthesia WorkStation is used to provide an accurate and continuous supply of medical

	gases mixed with an accurate concentration of anesthetic vapor and deliver this to the patient at a state pressure and flow.
2	Anesthesia machine should have inbuilt Ventilator, Vaporizer, Gas delivery system.
3	Anesthesia WorkStation should be Pendant mounted.
4	Material of the Anesthesia WorkStation should be Epoxy powder painted steel/rust-proof ABS plastic with metal reinforcements.
5	Mode of integrated scavenging system should be active.
6	Minimum battery backup time for Anesthesia WorkStation, ventilator and Monitor should be 1 hour.
7	Anesthesia WorkStation should have facility of manual ventilation in case of electricity & battery failure.
8	Anesthesia WorkStation should have facility of following:
9	A. Gas & agent delivery in case of electricity and battery failure.
10	B. Should display the efficiency showing the qualitative & quantitative analysis.
11	The components like Anesthesia Machine, integrated ventilator, and vaporizer (all types) from the same manufacturer.
12	Patient monitor may be supplied from same or different company.
13	Anesthesia WorkStation should have electronic mode of gas mixing.
14	Anesthesia WorkStation should have electronic type of hypoxic guard.
15	Machine should be compatible to vaporizer like Isoflurane, Sevoflurane and Desflurane of same make.
16	14. Volume capacity of breathing system should be 1.5 liters or more.
17	15. The integrated ventilator should be electronically controled and electrically driven to ensure precise and accurate volume delivery.
A	Ventilator should have modes of ventilation like VC,PC, SIMV and PS.
B	Digital display of pressure value for cylinder and pipeline pressure.
C	Single chamber soda lime canister with a capacity of 0.6 kg or higher and should be autoclavable.
D	Independent port for open circuit.
E	Minimum range of tidal volume should be from 10 ml to 1400 ml in volume control mode.
F	RR from 4-60 BPM

G	The Machine should be able to work on ambient air ventilation in case of total gas supply failure for patient safety.
17	Screen size of the Ventilator Monitor should be 15" or more.
18	Anesthesia WorkStation should have minimum warranty of 5 years and CMC for 5 years
19	System should be US FDA OR European CE certified
20	. The anaesthesia machine should be of latest technology & model.
21	The anesthesia machine should have heated flow sensing technology for better infection control & prevention.
22	The machine should have integrated warming system to avoid the condensation in breathing system.
23	The system should have standard electronic charting facility for preparation of electronic charts of data.
24	Accessories to be supplied with the system/Unit:
	Reusable patient circuit (Adult & Paed.)= 01 no. each
	Reusable masks (Adult & Paediatric) One of each size 0,1,2,3,4 & 5
	ETCO2 sample lines= Minimum 25
	No. of Vaporizer (Sevoflurane) One each with each machine
	Water traps -20 Nos.
	Disposable breathing circuit 10 No. for adult and 10 nos. for Pediatric
	Bidder should supply all necessary hardware, software, cables, etc. required for successful installation and commissioning of the entire system.
9.	<p>Patient Anesthesia Monitor – 2Nos.</p> <ul style="list-style-type: none"> - Must be suitable for adult and pediatric patients monitoring. - Must have monitoring of ECG, Respiration, NIBP, SpO2 Nellcor, Temperature, EtCO2 & other <p>Anesthesia gas monitoring (AGM) integrated in machine as standard.</p> <ul style="list-style-type: none"> - Anaesthesia Gas monitoring (AGM) must have Paramagnetic/permanent oxygen cell that will be integrated with Anaesthesia Machine. - Must have 2hrs (typically) of battery backup as standard in every monitor. - Should have ST Analysis, Arrhythmia Detection, Pacer Spike detection, Drug Dose Calculation and OxyCRG as standard in every monitor. - Should have modular 15 inches display or above TFT-LCD color touch screen display with

	<p>minimum 8 channels of waveforms.</p> <ul style="list-style-type: none"> - Defibrillator and ESU protection should be present. - Monitor access should be with Touch Screen or rotary knob and fast access key for quick function. - Monitor should have USB port for software upgrade. - Machine should have Rs 232 connectivity port. - The system should have provision to see all the data of Anaesthesia machine, Anaesthesia gas monitor & Patient monitor should come on any one of the equipment screen for easy viewing.
10.	The complete Anaesthesia workstation should be supplied with standard electronic charting facility for preparing clinical electronic charts of patient vitals. Complete working solution including Anaesthesia machine, vaporizers, integrated ventilator, patient monitor & electronic charting system should be from same OEM.
11.	<p>Accessories with each unit:</p> <ul style="list-style-type: none"> - Trolley with minimum one drawer. - Wring surface on trolley - Pin Index yokes for O2 & N2O - Pipeline connections for all three gases. - Isoflurane & Sevoflurane Vaporizer – 1 no. each - Adult & Pediatric reusable patient reusable patient Double limb circuits - 01 no. each - Anesthetic mask – 02 nos. each of all sizes - ECG Cable (3/5 lead) – 02 nos. - Spo2 Sensor (Adult and Pediatrics) - 02 no. each - NIBP Cuff (Adult and Pediatrics) - 02 no each. - Temp. Probe (Skin and rectal) - 01 no. each. - Sampling line for ETCO2/gas monitoring – 50 nos. - Water trap condenser – 20 nos. - Central gas supply hoses (Color coded) - Flow sensors - 05 nos. with each machine - Soda lime - 10 Liters
12.	<p>Additional Modules with 02 Anaesthesia workstation</p> <ul style="list-style-type: none"> - Desflurane Vaporizer – 01 no from same manufacture
X	Surgical Operating OT Table
1.	Four/five section eccentrically positioned RADIO-TRANSLUCENT Table Top
2.	Operating Positions: Height Adjustment, Lateral Tilt, Trendelenburg, Reverse Trendelenburg and Back Section are precisely and smoothly controlled by REMOTE SWITCH with through ELECTRO-MECHANICAL/ELECTRO-HYDRAULIC SYSTEM.
a.	Head & Foot Section are manually operated.
b.	Auto level (return to zero) function available on remote control
c.	Table should have patient reverse orientation function to detect when head and Leg section are reversed during any surgical procedures
d.	There should be memory function in the main wired remote control for saving 5 memory positions, and in wireless remote 5 memory positions can be saved as per surgeon's comfort. User shall be able to save or erase any memory

3.	The remote-control panel should be wired and one wireless design, both remote with LCD screen with real time position indication of table top along with measurements of height in mm, side tilt, Trendelenburg and back section in degree. Both Hand control should have individual button for all four operating positions for better hygiene and adjustment
a.	There should be an anti collision/ crush function under table top, i.e., it should automatically Detect if there is any object like c-arm, etc, under the table top, then it should prevent the collision automatically with visual indication on remote control.
b.	There should be an emergency panic button on the base, to cut of electrical supply in the unlikely case of any malfunctioning.
c.	Stainless Steel Covered Base and Cylinder Covers for easy cleaning and hygiene
d.	Complete with Stainless Steel Side-Rails, Clamps, 1 set cushions for each section
e.	Pneumatic leg stirrups with trolley one pair
	The manufacturer is ISO 9001:2015 &13485:2016 certified. Issued from certification agencies listed on NABCB(QCI) from MDQMS
4.	Should have USFDA registration with valid link of USFDA website since last five years
a.	Documentary evidence regarding firm registered with EA (European Economic Area competent authority is required OR European Representative registered with EA (European Economic are Competent authority appointed by firm is required OR other document like certificates from notified body along with declaration of conformity is required
b.	<p>Technical specifications: (variation 5%)</p> <ul style="list-style-type: none"> ● Tabletop length: 2000mm ● Table top width: 500mm or more ● Table top height- minimum 700mm to max 1000mm ● Trendelenburg/rev trendelenburg- 18- 20 degree ● Lateral tilt – 18-20 degree ● Back section – 70-80 degree up, 20 degree down ● Leg section- down 90 degree ● Head section: +45 degree, - 90 degree ● Standard Accessories ● L-shaped Anaesthetic frame with clamp : 1Pc. ● Shoulder Support with Pad with clamp Arm board with clamp : 2Pcs ● Lateral Support with pad and clamp Arm Support with clamp : 2 Pcs ● Wrist Strap with clamp : 2 Pcs ● Goepel type special Lithotomy Crutches-padded with Straps and clamp : 2Pcs ● Arm Rest with clamp : 2 Pcs ● Mattress : 2P

TECHNICAL SPECIFICATIONS FOR MODULAR OPERATION THEATRES – MINOR OT'S	
GENERAL	
A	The scope of work includes:
1	Supply, installation, testing and commissioning of all items including wall paneling & ceiling paneling, connected frame structures & substructure, OT doors, PVC flooring, Peripheral Lighting, Pendants, OT Light, Touch Screen Control Panel, Laminar flow, HVAC System, Storage shelves, Anesthesia Workstation as may be required for complete installation and trouble-free functioning of the operation theatres as part of the attached schedule of quantities, technical specifications & site conditions.
2	MGPS System: Medical Gas Pipeline up to individual OTs will be provided by the MGPS Contractor. However, Installation of Anesthesia/ Surgeons pendant shall be under the scope of the MOT tenderer. The bidder should ensure that all works carried out are to the recommendations of the Department of Health and Social Security's HTM 02- 01 /NFPA 99C / ISO 7396-1
B	General Conditions
1	The complete Modular OT works shall comply with all relevant safety and standards including NABH guidelines amended upto date.
2	The contractor is fully responsible for Installation and commissioning of all equipment mentioned in the tender.
3	Bidders are advised to visit the site for assessment before the submission of tender.
4	The Prefabricated modular construction should be designed and constructed for exact size, flexibility for the operating team, easy field installation and future disassembly, enlargement, or relocation. On approval of the designs submitted, the successful bidder shall provide complete all necessary works, install new hardware, software and implement services to complete the works all in accordance with standard practice and norms.
5	Materials used for the construction of Modular operation theatre shall be accompanied by test reports from a third party NABL accredited Lab. Test reports should be produced.
6	The Operation Theatre should be commissioned with the following test as per NABH guidelines
A	Temperature & Humidity test.
B	Air Particulate count.
C	Air Change rate calculation.
d	Air Velocity at outlet of terminal filtration unit/filters.
e	Pressure differential levels of the OT with respect to ambient/adjoining areas.
TECHNICAL SPECIFICATIONS	
C	WALL PANELING SYSTEM
1	Cladding structure shall consist of insulated stainless steel wall panels with total panel thickness between 50-60 mm. It shall be 0.8 mm thick, 304 grade stainless steel from the Front and back with 0.8 mm PPGI Sheet sandwich panel, with core consisting of rigid Polyurethane foam injected under high pressure with a minimum density of 40 kg/m ³
2	The individual wall panels shall use the tongue and groove/suitable technology for joining two panels. No welding shall be allowed
3	The panel should be pretreated with chemicals which ensure proper adhesion and are environmentally friendly. Necessary certificate should be provided

4	It shall have minimum number of junctions. The gaps between panels shall be suitably filled with metal filler/epoxy.
5	Anti-bacterial paint shall be coated on the wall. Wall elements shall be resistant to all standard cleaning agents, disinfectants and fumigation agents. Panels shall be covered with protective sheath to prevent scratch during installation.
D	CEILING PANELING SYSTEM
1	The prefabricated ceiling plates/cassettes shall be made up of sandwich panel front side SS 304 panels with sheet thickness of at least 0.8 mm and back side with PPGI Sheet of 0.8 mm with of PUF with minimum density 40kg/m ³ , matte finished and coated With antibacterial paint. It shall be from the same manufacturer as that of wall panel. Total thickness shall be 30-40mm.
E	Control Panels for Operation Theatre
1	The Surgeon Control Panel should meet Electrical Safety codes for High & Low voltage system, applicable to current standards.
2	The Theatre Control Panel shall be designed to cope with changing technology and equipment in operating environments. Control panel shall be user friendly and with ease of operating and maintenance. Control panel should have smooth flat surfaces for easy to wipe down.
3	The control panel should work as the central control panel for the HVAC controls, instruction board, and communication interfaces- both audio and video etc. It should be CE or UL listed.
4	The panel should be Touch screen type configured to incorporate all the services that Operation room staff requires. It shall be wall mounted.
5	All internal wires shall be marked with plastic ferrule type cable markers, for ease of identification. The Control Panel shall be designed for front access only.
6	The panel shall contain various displays and controls as below:
A	Time Day Clock - should be digital type and clocks having high brightness characters.
B	Time Elapse Day Clock - should be digital type and clocks having high brightness characters.
C	Temperature Indicator with controller - shall indicate the theatre temperature, which shall be connected to the local pressure switches of Air-Conditioning system. Indicator shall be of digital type with high brightness characters, not less than 30mm in height.
D	Humidity Indicator with controller - shall indicate the humidity inside the theatre which shall be connected to the local pressure switches of Air-Conditioning system. Indicator shall be of digital type with high brightness
E	General Lighting controls/ Indication – shall incorporate all the necessary controls of the lighting system (on / off and intensity control) inside the theatre. On/ Off and dimming controls organized in groups to provide uniform illumination. The control panel should also have control for Surgical light switch on off and intensity control.
F	Medical Gas Alarm System Indication – shall indicate High and Low gas pressure for each gas service present in the operating theatre and shall have an audible buzzer with mute

	facility. The medical gas alarms shall be connected to local pressure switches located downstream of the last isolation valves.
G	Hand Free Telephone – incorporated in the panel
H	HEPA filter efficiency – shall indicate the status of the HEPA filter fitted inside the plenum box in the OT.
I	Music system - connected with speakers of reputed brand
J	Manufacturer should have ISO 13485 and ISO 9000
F	Door and Frames (Hermetically Sealed Type) – Automatic- Sliding
1	Doors should be a hermetically sealed, single sliding door of size 2.1 (H) X 1.5 m (W) to maintain sterility and the correct air pressure in the room.
2	Doors should be manufactured of the highest quality High Pressure Laminate
3	Door's construction should properly fit with wall panels and should create a uniform system of the operating theater.
4	Doors should be made as sandwich-type – from two HPL Sheet, the space between them should be filled with particle board or PUF (cyclopentane mixing agent) or with so called honeycomb, glued to the plates. In installation places of hinges and locks, strengthening components must be used
5	Thickness of door wings should range in between 40 and 60mm.
6	Frames should be integrated into the panel system and should be prepared individually for each type of door.
7	Fixtures should be made of stainless steel and adapted to requirements – size and weight of door wings, shape of door handles prevents from hooking the aprons.
8	Automatic equipment for door should be provided by reliable manufacturers which should be European CE certified.
9	Operation of door should be realized through a wall board, elbow buttons or touch less buttons for operating room only.
10	Doors should be able to be equipped with door viewers, windows used for room observation.
G	OT Pendant – Single Arm Surgeons Pendant
1	Surgeons Pendant Systems should have the facility to provide convenient positioning of medical equipment, medical gas terminal units, electrical and specialty services in operation theatre.
2	The support arms should be extremely robust and revolve on high quality bearings, so that the pendant head glides smooth and quick to any desired position.
3	Each arm should be capable of 330 – 340 degrees of rotation and be fitted with stops which can be easily adjusted to suit the desired mode of operation.
4	It should be possible to replace all medical gas hoses without the need for onsite crimping of ferrules. All medical gas hoses shall be colour coded to as per standard.
5	The Pendant Service Heads / Column should be capable of accepting a range of shelves, drawers and infusion poles or other accessories. The Pendant Heads / column should support the range of Physiological Monitor Mounting Solutions.
6	Service head should design to host, Base, Gas Module, Electric Module, and shelves.
7	The Pendant Service Heads / column should be supplied with medical gas terminal units. The medical gas outlets fully comply with ISO 7396-1 and DIN 13260-2 standards.
8	Each surgeon's pendant should be Single Arm having multi movement with load carrying capacity of minimum 80 kg having following facilities.

A	Single movable Arm with total coverage of minimum 1000 mm and 330 degrees.
B	The Pendant Service Head/column should be modular with minimum 1000 mm head.
C	Gas outlets: O2 – 2 no, Vacuum – 2 nos, Air (4 Bar) – 1 no, Air (7 Bar) – 1 no, CO2 – 1 no.
D	Medical rail - 1 No.
E	Shelf – 2 nos. & shelf with drawer - 1 no.
F	IV Fluid Pole – 1 No.
G	Electrical Sockets – 8 nos. 6/16 Amp. 6 pin sockets.
H	RJ 45 socket – 2 no
9	Pendants should comply with applicable standard.
A	Basic requirement of the medical device directive (MDD 93/42/EEC) (b) IEC 60601-1-2/medical electrical devices
B	European Norm ISO EN 11197 (special requirements for the safety of medical Supply units)
C	Pendent Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission
D	The terminal units must be according to ISO 7396-1 and DIN 13260-2 standards.
E	Medical gas hoses shall be compliant to ISO 5359:2009 color coded throughout its length.
H	OT Pendant –Anesthesia Pendant
1	Anesthesia Pendent Systems should have the facility to provide convenient positioning of medical equipment, medical gas terminal units, electrical and specialty services in operation theatre.
2	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.
3	Arm should be capable of 330 – 340 degrees of rotation and be fitted with stops which can be easily adjusted to suit the desired mode of operation.
4	Infinitely variable rotational stops should be available from 0-330 degree which shall enable precise of limits travel to be set to ensure maximum freedom of movement, whilst protecting walls and ancillary equipment.
5	It should be possible to replace all medical gas hoses without the need for onsite crimping of ferrules. All medical gas hoses shall be color coded to as per standard.
6	The Pendant Service Heads / Column should be capable of accepting a range of shelves, drawers, and infusion poles or other accessories. The Pendant Heads / column should support the range of Physiological Monitor Mounting Solutions.
7	Service head should design to host, Base, Gas Module, Electric Module, and shelves.
8	The Pendant Service Heads / column should be supplied with medical gas terminal units. The medical gas outlets fully comply with ISO 7396-1 and DIN 13260-2 standards. Medical gas hoses fully comply with the standard BS EN 739 and are provided with NIST connectors to this standard.
9	Each Anesthesia pendant should be Single arm having multi movement with load carrying capacity of minimum 80 kg having following facilities.
A	Single movable Arm with total coverage of minimum 1000 mm and 330 degrees.
B	The Pendant Service Head/column should be modular with minimum 1000 mm head.
C	Gas outlets: O2 – 2 nos, N2O – 1 no, Air (4 Bar) – 1 no, Vac – 2 no's, Venturi AGSS – 1 no.
D	Medical rail - 1 No.

E	Shelf – 1 nos. & shelf with draw - 1 no.
F	IV Fluid Pole – 1No.
G	Electrical Sockets – 10 nos. 6/16 Amp. 6 pin sockets.
H	RJ 45 socket – 2 no
10	Pendants should comply with applicable standard.
A	Basic requirement of the medical device directive (MDD 93/42/EEC) (b) IEC 60601-1-2/medical electrical Devices
B	European Norm ISO EN 11197 (special requirements for the safety of medical Supply units)
C	Pendent Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission
D	The terminal units must be according to ISO 7396-1 and DIN 13260-2 standards.
E	Medical gas hoses shall be compliant to ISO 5359:2009 color coded throughout its length.
I	Laminar Air Flow System – SS 304
1	The laminar flow should be designed to provide as key to preventing patients being infected during operation lies on the design of sterilized air conditioning system and the flow pattern of draught as well as the quality of engineering.
2	Laminar flow unit should guarantee filtered air supply with steady speed of approximately 0,23 m/s.
3	Installation of laminar flow unit should serve to prevent bacterial contamination, viruses and dust particles elimination.
4	The Laminar flow system should comprise of SS Frane and sealed gasket. The filters installed in the plenum should be suitable for application for laminar flow and clean rooms. These filters should meet following specification.
A	Separators: Continuous thermos plastic chord
B	Sealant: Polyurethane
C	Gasket: One piece polyurethane
D	MPPS average efficiency: >99.95%
e	3 Micron DOP efficiency:>99.99%
f	Final pressure drop: 600pa (max)
g	Max. Operating Temperature: 60 degrees Celsius
h	Max. RH: 40-60 %
5	The ceiling system should be equipped with “H 14” class HEPA filters position in the ceiling to achieve 0.23m/sec flow at the diffuser.
6	The filtration ceiling system should have diffuser/flow equalizer to achieve uniform & constant air distribution over the whole surface.
7	The air management system should be designed to achieve class 100 with the following parameters:
8	Bacteriological class =B (5 CFU/m ³)
9	Particle decontamination kinetics CP =5 min
10	The positive pressure should be maintained inside the OT to prevent contamination due to air from outside the OT.
J	AHU with Outdoor unit
1	Air Handling Unit (AHU)

Supply, Testing and Commissioning of Double Skin AHU (Air Handling Unit), with thermal breaker, with DX-Coil of **3200 CFM**, consisting of fan section with DIDW centrifugal fan with 125mm WG static pressure. The AHU shall be made of extruded aluminum framework having plasticized G.I panels having injected 25mm PUF of 38 Kg/CUM density in between the drain pan of 16G aluminum in two layers having nitrile foam insulation in between. The extruded frame for motor and blower duly mounted with centrifugal backward curved blower along with electric motor, 10- micron rating washable pre filters and 5 micron rating washable fine filters, fire resistant flexible canvas connector, duct heater bank of strip heaters with geyser stat, humidistat. Inlet side twin column control dampers, actuator for CSD (ON / OFF type). DX coil section of 1/11 and 7/8, mixing box, mixing chamber with air VCD, 6 row deep DX cooling coil etc.

DOUBLE SKIN CASING:

Outer skin	0.6 mm Pre- coated GI
Inner Skin	0.6 mm Plain G.I
Framework	Thermal break Al. profile with thermal barrier.
Thickness of insulated panels	25 mm Thick, CFC Free PUF injected (Density: 40 kg / Cu.
Unit Base	GSS base channel

DX COIL: (R-22)

Coil Casing/Blank offs	GI
Material Of Tube	Copper
Tube Dia (mm / inch)	9.5 mm / 3/8" O.D.
Thickness of tube (SWG / mm)	30 SWG / 0.31 mm
Header Material	Copper
Thickness & Material of fins	0.15 mm Plain Aluminum
No. of Fins per inch (FPI)	11 / 12

FILTERS:

Media of Filters	Synthetic (non-woven type).
Efficiency of Pre-filters (EU-4)	90 % down to 10 microns
Efficiency of Fine-filters (EU-5)	99 % down to 05 micron FAN &

AHU SHALL HAVE

- Mixing box with manually operated FA & RA damper in Al construction.
- Filter section with 50 mm thick (EU-4) box type pre filter.
- Coil section with 6 row deep DX- cooling coil with single distributor.
- Fan section with imported DIDW centrifugal backward curved fan, Drive set with V belt & Motor(EFF-2).
- Fine filter section with 305 mm thick (EU-5) flange type fine filter.
Manually operated SA damper in Al construction.

8TR Outdoor unit

OPERATING & PHYSICAL PARAMETERS: (Minimum requirement)

	<p>Air Qty (CFM) 3200</p> <p>SP (mm wg) 125</p> <p>Fan Type BC</p> <p>Fan Día 355</p> <p>Fan RPM 2461</p> <p>Fan Outlet Velocity (m/s) 9.24</p> <p>Shaft Absorbing Power 3.23</p> <p>DX Coil RD 6</p> <p>AHUs</p> <ul style="list-style-type: none"> AHUs should be CE certified for Electrical & Mechanical safety. AHUs should be certified in accordance to EN-1886-1998 Certifications. <ul style="list-style-type: none"> Mechanical Strength – Class 2A Casing Air Leakage – Class B Filter Bypass Leakage-Class F9 Thermal Bridging –Class TB2 <p>Coils</p> <ul style="list-style-type: none"> All Coils should be AHRI certified as per test standard ARI-410. <p>All coils should be UL certified for safety</p>
K	Double Dome OT Light
	<ul style="list-style-type: none"> Double Dome OT Light Should be flat compact based on innovative LED technology. OT Light should have lamp head of App 500-600 mm dia made of aluminum Single non winged round shape lamp head for easy maintenance and better sealing against dust and fumigation Should have Cold, high intensity light through multi lens matrix technology. Should have intensity controller to offer different level of light intensity Should have colour temperature controller to offer different level of colour temperature. The color temperature should remain constant even when intensity is increased or decreased. CRI should be close to average daylight, Ra- 96 or more, R9- 95 or more, for true tissue identification. The Lights should have LED Light engines in which the color mixing of various LED Lights should take place inside the engines itself which should prevent casting of color shadows. Should be strobe free light Should have endo mode facility Should have depth mode Light should have electronic focusing through digital controller Should offer the highest possible hygiene during surgery through touch free adjustments for Intensity, Colour temperature, Lamp on/off, Endo mode, Depth Mode, Electronic focusing Should have digital controller with LCD display for showing all important parameter like intensity, colour temperature, focusing, endo mode,mode of operation, date and time, total hours usage of light, etc Should be spring-balanced lamp head with a moulded plastic Sterilizable Handle in the middle for manual focusing and lamp head movements Quality Certifications: The manufacturer is ISO 9001:2015 &13485:2016 certified. Issued from certification agencies listed on NABCB(QCI) from MDQMS

	<ul style="list-style-type: none"> ● Should have CE 4 digit notified Body ● Documentary evidence regarding firm registered with EA (European Economic Area competent authority is required OR European Representative registered with EA (European Economic are Competent authority appointed by firm is required OR other document like certificates from notified body along with declaration of conformity is required ● Technical Data: <ul style="list-style-type: none"> ● Intensity (Lux) : 160000 + 120000 ● Colour temperature (K) : 3800 to 5600 ● Main Power Supply (V): 220 ● Life of LED : 50000 hrs (with monitoring from control panel)
M	Operating List Board
1	One operating list board of minimum size of 1000 x 700 x 60 mm deep should be provided in each operating theatre.
2	It should be made of glass having Magnetic properties and should be flushed to the wall of the operating room.
N	Hatch Box / Pass Box
1	It should be made of SS 304 Grade
2	Size 600 X600X600 mm
O	X-Ray Viewing Screen
1	The theatre is to be equipped with a 2-plate X-Ray viewing screen.
2	The X-Ray viewing screen illumination should dimmable LED.
3	The equipment should have high level of control luminance, without flicker and should be installed flushed with the theatre wall for hygienic and ease of cleaning purpose.
4	LED Lamps should provide a uniform level of illumination across the entire front panel diffuser and should be controlled by electronic step-less dimming controls to provide flicker free dimming from maximum brightness to off.
5	Should have clipless mechanism to hold & secure the X-Ray negative film when in use.
P	Storage – SS 304
1	The storage Unit should be made from SS304 grade
2	Modular system of built-in operating theaters must enable possibility to install different types of cabinets based on customer requirements, which must be flushed into place behind wall panels.
3	Cabinets must be in same color shade or SS finish as wall panels and doors to achieve uniform look of operating theater
Q	PVC Flooring - Operation Theatre
1	It should be with 2mm anti-static seamless PVC flooring.
2	Floor should be smooth, non-slip, impervious material conductive enough to dissipate static electricity but not conductive enough to endanger personnel from electric shock. Conductivity reports should be furnished
3	Electrostatic charge dissipation combat PVC seamless flooring of very high quality should be provided.
4	Thickness not less than 2 mm. continuous roll should be used and joints should be welded by special PVC thermal welding units using PVC welding bars of same colour & compatible material to provide continuous sealed surface.

5	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. Method statements required before commencing works at site.
6	It should be inert to body fluids, chemicals and disinfectants. It should not be affected by temperature variation within the OT.
7	The floor should efficiently discharge electric charges up to 2 kV.
8	Flooring should be done by skilled workers of accredited agencies authorized by the supplier of PV sheets. The electrical resistance (point to ground) should be within 2.5×10^4 to 5×10^6 ohms. The floor should not allow build-up of electrical charge beyond 100 volts due to antistatic effect. The corners should not be terminated sharply and concealed cove- former (aluminium) should be used to overlap the wall panel to a height of approx. 100 mm and sealed perfectly and uniformly. Self-levelling compounds should be used.
9	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 every 150 sq.ft area and attaching it to the main earthing strip/ground.
10	copper grounding strips (0.05 mm thick, 50 mm width) should be laid flat on the floor in the conductive adhesive and connected to copper strip of grounding. The connection from copper grid should be brought out uniformly at places to form equipotential grid.
11	Flooring should be mechanically shock proof, scratch proof, flame retardant and anti-microbial.
12	Corners should be uniformly curved. Final surface should be non-corrosive to biological fluids and detergents.
13	Color should be uniform pleasant and matching with ambience and as approved by the client before supply is affected.
14	Suitable self-levelling should be done before PVC flooring to avoid undulation within the MOT. Method statements required before commencing works at site. Floor levels after PVC flooring should match with the external corridors of Operation Theatre.
15	The self-levelling compound shall be of the type that does not promote bacteriological growth, and should validate by test reports.
R	Peripheral Lights & Clean room luminaries
1	Lighting in the operating theater must be in accordance with European standard and World standards.
2	It should be fitted outside the air ceiling system area and flush with the ceiling in the operation theatre suitable to required illumination of OT.
3	Minimum required IP protection is 54 and intensity of lighting in operating theater should be min. 500 - 1000 lux. it should be minimum 6 in numbers for each OT.
4	The LED lamp of size 600 x 600 mm with optical antiglare system for adjustable light distribution.
5	The color temperature of the light should be 5700 - 6500 K
6	Color of visible parts of lighting fitting must be in accordance with color of ceiling cassettes. The intensity of lights should be controlled by electronic stabilizers.
S	Electrical Installations incl Distribution Box
1	All internal wiring should terminate in connectors with screw & clamp spring. Connections of the clip- on typemounted.

2	Individual fuses or miniature circuit breakers should protect all internal circuits. Complete schematic drawing with description should be enclosed with the equipment.
4	Power sockets within the Operating Theatres ancillary areas should be matched to those in the rest of the hospital.
5	Each wall of MOT should have minimum 02 Nos. 6/16A hybrid switch socket & 32A industrial socket at any two walls as per IEC standard.
6	All equipment should be fully and permanently labelled to identify and describe the function, operation and voltage of the apparatus concerned. Throughout and upon completion of the electrical installation, tests in accordance with relevant sections of the local wiring regulations should be carried out and the results recorded.
T	Pressure Relief Dampers
1	Pressure Relief Dampers should be provided in each room to prevent cross contamination of air from clean and dirty areas.
2	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 area.
3	Counterweight balancing system should be provided in the PRD to maintain positive pressure inside the operation room.
4	Air pressure stabilizers should have unique capability of controlling differential pressure to close tolerance. The PRD should remain closed at pressure below the set pressure and should open fully at pressure only fractionally above the threshold pressure.
5	The frame, body and blade should be of grade SS304 stainless steel. The body should be epoxy powder coated as per standard BS colours.
6	The PRD design shall be as per HTM 2025:1994 for ventilation in healthcare premises.
U	Internal HVAC Ducting & Exhaust System
1	HVAC ducting shall be made of fabricated Aluminium duct with all fittings such as neoprene rubber gaskets, elbows, tee bends, special off-chutes, turning vanes, splitter dampers, insulated doors, transformation pieces, joining with easy slip on flange, gasket, corner piece, cleat, aluminium volume control dampers etc. as reqd. as per updated IS 655, SMACNA standards at site including suspension and supporting arrangement for plenums
W	ANAESTHESIA MECHANICAL WORKSTATION
1.	The anesthesia machine, integrated ventilator & vaporizers (all types) should be of same manufacturer.
2.	Power Supply:
a.	The unit shall work on 230V + 10%, 50 Hz AC main supply with a battery power for at least 45 minutes.
b.	Power supply shall contain a suitable servo-controlled stabilizer/Constant Voltage Transformer
c.	A complete and detailed operation manual in ENGLISH must be supplied with the unit.
3.	Safety Standards:
a.	The unit shall be manufactured in the European CE/BIS certified
b.	The unit shall be Europe CE approved as a complete workstation, CE certificate shall be issued for the combination with a patient monitor as well.
c.	The unit shall be compliant with power supply standard IEC 60601 (Third Edition): "Medical

	Electrical Equipment, Part I: General requirements for safety” or equivalent, i.e. UL 60601-1, EN 60601-1, JIS T 0601-1, CSA C22.2 No 606.1, AS/NZ 3200.1.0, IS-13450, ISO/IEC
d.	The unit shall be compliant with collateral standard IEC 60601-1-2 for electromagnetic compatibility
e.	The unit shall be compliant with ISO/IEC 80601-2-13:Medical Electrical Equipment part 2-13 safety standard for anesthesia workstation and accessories
	Anesthesia machine and ventilator shall have Protection against electric shock “Class 1” & “Type” BF
4.	Anaesthesia Machine:
a.	The main framework of the machine & the working surface shall be of stainless steel or corrosive resistant and have dimensions of not less than 47X38cm
b.	The unit shall incorporate a 15” configurable touch screen with a drawer unit and a monitoring shelf.
c.	At least three user configurable views that can be changed intraoperatively
d.	The unit shall have provision for piped line supply of O2 (Oxygen), N2O (Nitrous Oxide) & Air with color coded anti-static hoses and connections to fit the gas outlets
e.	Pressure gauges for pipeline gases which should be easily visible and located in the front panel.
f.	The machine shall be suitable for supplying O2 and N2O from medical gas cylinders through flush type pin index yokes.
g.	The machine shall be fitted with following attachments:
	Pin index yokes for each O2 and N2O cylinders (size E) with pressure regulators
	Pressure gauges for both pin index cylinders which should be easily visible on the main display
h.	Mechanical flow meters for O2, N2O & Air with O2 on the left hand side and maximum flow rates not less than 15 l/min. There should be Low flow meters for O2 and N2O (Range: 0.1-1 lt.). Fresh gas flow can be reduced up to 0.2L/min whilst suitable for low flow & minimal flow anesthesia.
i.	External fresh-gas outlet, activated via the display of the main unit
j.	Emergency O2 flush
k.	Vaporizer manifold should hold minimum of two vaporizers.
l.	Fully automatic self test that requires no user interaction once the test has started
m.	All required manual steps incl. pictures of the self test are indicated on display of the anesthesia device
n.	Calibration of the flow sensors shall be included into the daily device self-test and shall not require disassembly of the ventilator
o.	Vaporizers (Low flow compatible) shall be manufactured by the same manufacturer of the anesthesia device, no OEM:
	Sevoflurane vaporizer with universal standard key filler type anesthetics agent adaptor
	Isoflurane vaporizer with universal standard key filler type anesthetics agent adaptor

5.	The following safety devices shall be incorporated with the unit:
a.	Anti-Hypoxic device for O ₂ and N ₂ O: Oxygen Ratio Controller to guarantee minimum of 21% oxygen in O ₂ /N ₂ O mixture, N ₂ O cut off when O ₂ flow is less than 0.2 L/min or no oxygen flow.
b.	Audible O ₂ supply failure alarm system (60 dB at 1m distance for more than 7 seconds) which cut off other gases and open to atmosphere
c.	Should be incorporated with an advanced anesthesia gas monitoring module with the display of age-corrected xMAC value.
d.	Machine should be suitable for adult, pediatric & Neonate patients.
e.	Vaporizer interlock facility, automatic without any user interaction
f.	Mechanical breathing system pressure indicator
g.	Manual ventilation using a manual breathing bag and APL valve at least with O ₂ and a volatile anesthetic must be possible in the event of a fault and with the device switched off.
h.	Mechanical ventilation with ambient air in case of complete failure of the gas supply.
i.	Integrated, separate O ₂ flow tube for supplying the patient with oxygen in any operating state of the device (off, standby and operation as well as in case of failure) available.
j.	Mechanical ventilation must not stop and shall be possible in the event of failure of any external media supply, failure of the central gas supply and empty reserve gas cylinders
k.	Mechanical ventilation with ambient air intake in case of a total gas supply shutdown shall be available
6.	Circle absorber system complete with a reusable 1.5 L capacity canister for Soda lime with mounting facility
7.	Breathing system:
a.	Must be latex free & heated. Heater can be deactivated for special operation case.
b.	Integrated inspiratory and expiratory flow sensors without additional cables
c.	Calibration of the flow sensors shall be included in the device self-test and shall not require disassembly of the ventilator
d.	In case of flow sensor failure the device shall still be able to continue mechanical ventilation
8.	Each unit shall be supplied with active Anesthesia Gas Scavenging System.
9.	Anaesthesia Ventilator:
1	The unit shall be a Mechanically controlled gas mixer with flow-tube & electrical driven ventilator & integrated fresh gas decoupling facility.
2	The machine shall offer patient categories for adults, pediatrics and neonates with preconfigured settings for ventilation parameters and alarm limits
3	Ventilation parameters such as tidal volume and respiratory rate shall be calculated and pre-set based on the patient's height regarding ideal bodyweight.
4	The unit shall not require special bellows or water-traps when ventilating neonatal patients
5	The unit shall have following modes /features of operation:

	Manual/Spontaneous Ventilation using APL valve with pop-off function to release the pressure from the breathing system
	Pressure Controlled Ventilation (PCV)
	Volume Controlled Ventilation (VCV)
	PCV-SIMV
	PCV-SIMV-PS
	VCV-SIMV
	VCV-SIMV-PS
	Pressure Support ventilation mode (Upgradeable)
	PEEP
	Volume controlled ventilation mode with decelerating flow, inspiratory flow and inspiratory pressure are automatically regulated to deliver the set tidal volume at the lowest possible inspiratory pressure.
	For regional anesthesia cases, a monitoring mode with measurement of EtCO ₂
	Cardiac bypass mode shall be available
6	<p>The equipment shall have separate control knobs or keys to set each of the following parameters with displaying facilities and shall be able to vary in following ranges including advanced neonate support.</p> <p> Tidal volume in VCV : 10-1500 ml Respiratory frequency : 3-100 cycles /min I:E ratio : : 4:1 – 1:10 Airway pressure : 5-80 cm H₂O PEEP : 2-35 cm H₂O Inspiratory pause : 0%-60% Flow Trigger : 0.3-15L/min </p>
7	<p>There shall be display and alarm facilities for the measured value of following parameters. Peak, Plat & mean Airway pressure, PEEP, Expired tidal volume, Resp. Rate, Minute Volume, MVleak, Airway Resistance, compliance, I:E Ratio, FiO₂% (XGM : xMAC, in/etN₂O, in/etCO₂, etO₂, deltaO₂, in/etISO, in/etSEV, in/etDES)</p>
8	There shall be display of Pressure/Volume and Flow/Pressure loops
9	Graphical trend display of all measured parameters with zoom and cursor function for: MV, VT, RR, etCO ₂ , PIP, Pplat, PEEP, Pmean, FiO ₂ , etDES, R, Cdyn_mean, in/etISO, in/etSEV, in/etDES, xMAC.
10	Display of age corrected, automatic xMAC monitoring
11	Display of measured inspiratory/expiratory Tidal volume and Delta Tidal Volume
12	Display of patient compliance as averaged and breath-by-breath and trend
13	At least three configurable display layouts can be changed during operation

14	There shall be a safety mechanism for limiting high airway pressure.
15	There shall be audible and visual alarm facility for indicating high/Low pressure supply gas failure and power failure.
18	There shall be context menus for occurring alarms containing information on possible causes and remedies
17	Integrated gas analyzer measuring and displaying of inspiratory & expiratory O ₂ , CO ₂ and Anesthetic Agent
18	Analyzed sample gas is returned to the respiratory system.
19	All parts of the breathing system in contact with patient gas except the flow sensors shall be machine washable (no manual cleaning)
20	All parts of the breathing system in contact with patient gas including the ventilator shall be steam sterilizable (Autoclave)
21	There should be heating flow measuring mechanism for better infection control & prevention.
22	There should be no increase in peak pressures while using O ₂ flush.
23	The oxygen cell should be paramagnetic/permanent in nature. No galvanic cell is required so as to minimize the down time.
9.	Patient Anesthesia Monitor – 3 Nos. <ul style="list-style-type: none"> - Must be suitable for adult and pediatric patients monitoring. - Must have monitoring of ECG, Respiration, NIBP, SpO₂ Nellcor, Temperature, EtCO₂ & other Anesthesia gas monitoring (AGM) integrated in machine as standard. - Anaesthesia Gas monitoring (AGM) must have Paramagnetic/permanent oxygen cell that will be integrated with Anaesthesia Machine. - Must have 2hrs (typically) of battery backup as standard in every monitor. - Should have ST Analysis, Arrhythmia Detection, Pacer Spike detection, Drug Dose Calculation and OxyCRG as standard in every monitor. - Should have modular 15 inches display or above TFT-LCD color touch screen display with minimum 8 channels of waveforms. - Defibrillator and ESU protection should be present. - Monitor access should be with Touch Screen or rotary knob and fast access key for quick function. - Monitor should have USB port for software upgrade. - Machine should have Rs 232 connectivity port. - The system should have provision to see all the data of Anaesthesia machine, Anaesthesia gas monitor & Patient monitor should come on any one of the equipment screen for easy viewing.
11.	Accessories with each unit: <ul style="list-style-type: none"> - Trolley with minimum one drawer. - Wring surface on trolley - Pin Index yokes for O₂ & N₂O - Pipeline connections for all three gases. - Isoflurane & Sevoflurane Vaporizer – 1 no. each - Adult & Pediatric reusable patient Double limb circuits - 01 no. each - Anesthetic mask – 02 nos. each of all sizes

	<ul style="list-style-type: none"> - ECG Cable (3/5 lead) – 02 nos. - Spo2 Sensor (Adult and Pediatrics) - 02 no. each - NIBP Cuff (Adult and Pediatrics) - 02 no each. - Temp. Probe (Skin and rectal) - 01 no. each. - Sampling line for ETCO2/gas monitoring – 50 nos. - Water trap condenser – 20 nos. - Central gas supply hoses (Color coded) - Flow sensors - 05 nos. with each machine - Soda lime - 10 Liters
X	Surgical Operating OT Table
1.	Four/five section eccentrically positioned RADIO-TRANSLUCENT Table Top
2.	Operating Positions: Height Adjustment, Lateral Tilt, Trendelenburg, Reverse Trendelenburg and Back Section are precisely and smoothly controlled by REMOTE SWITCH with through ELECTRO-MECHANICAL/ELECTRO-HYDRAULIC SYSTEM.
a.	Head & Foot Section are manually operated.
b.	Auto level (return to zero) function available on remote control
c.	Table should have patient reverse orientation function to detect when head and Leg section are reversed during any surgical procedures
d.	There should be memory function in the main wired remote control for saving 5 memory positions, and in wireless remote 5 memory positions can be saved as per surgeon's comfort. User shall be able to save or erase any memory
3.	The remote-control panel should be wired and one wireless design, both remote with LCD screen with real time position indication of table top along with measurements of height in mm, side tilt, Trendelenburg and back section in degree. Both Hand control should have individual button for all four operating positions for better hygiene and adjustment
a.	There should be an anti collision/ crush function under table top, i.e., it should automatically Detect if there is any object like c-arm, etc, under the table top, then it should prevent the collision automatically with visual indication on remote control.
b.	There should be an emergency panic button on the base, to cut of electrical supply in the unlikely case of any malfunctioning.
c.	Stainless Steel Covered Base and Cylinder Covers for easy cleaning and hygiene
d.	Complete with Stainless Steel Side-Rails, Clamps, 1 set cushions for each section
e.	Pneumatic leg stirrups with trolley one pair
	The manufacturer is ISO 9001:2015 &13485:2016 certified. Issued from certification agencies listed on NABCB(QCI) from MDQMS
4.	Should have USFDA registration with valid link of USFDA website since last five years
a.	Documentary evidence regarding firm registered with EA (European Economic Area competent authority is required OR European Representative registered with EA (European Economic are Competent authority appointed by firm is required OR other document like certificates from notified body along with declaration of conformity is required
b.	Technical specifications: (variation 5%) <ul style="list-style-type: none"> ● Tabletop length: 2000mm ● Table top width: 500mm or more

	<ul style="list-style-type: none"> ● Table top height- minimum 700mm to max 1000mm ● Trendelenburg/rev trendelenburg- 18- 20 degree ● Lateral tilt – 18-20 degree ● Back section – 70-80 degree up, 20 degree down ● Leg section- down 90 degree ● Head section: +45 degree, - 90 degree ● Standard Accessories ● L-shaped Anaesthetic frame with clamp : 1Pc. ● Shoulder Support with Pad with clamp Arm board with clamp : 2Pcs ● Lateral Support with pad and clamp Arm Support with clamp : 2 Pcs ● Wrist Strap with clamp : 2 Pcs ● Goepel type special Lithotomy Crutches-padded with Straps and clamp : 2Pcs ● Arm Rest with clamp : 2 Pcs ● Mattress : 2P
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3.0 Reference to the Standard Codes of Practice

All Standards, Technical Specifications and Codes of practice referred to shall be latest editions including all applicable official amendments and revisions shall be followed by the contractor.

4.0 LIST OF MAKES

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 of equivalent reputed brand. Non BIS marked materials may be permitted by the WAPCOS only when BIS marked materials are not manufactured. If any make / brand of the “Material / Article” is not mentioned in following make list, then standard top 5 Manufacturers/ Agencies /Brand Make for that “ Material / Agency” will be considered for approval by WAPCOS.

SNO	ITEM/Material	Makes
1	Wall Paneling	Tata/Jindal/sail
2	Ceiling Paneling	Tata/Jindal/sail
3	PVC Flooring for OT as per tender specification	Gerflor/Tarkett/Jeoflor
4	Laminar Air Flow	Draeger PMEA/Hans Healthcare/SAI
5	Peripheral lights and clean room luminaries	SAI/Integromed/Hans Healthcare
6	Touch Screen Control Panel	Digiline/Bender/Biox
7	Storage Unit	SAI/Integromed/Hans Healthcare
8	Hatch Box	SAI/Integromed/Hans Healthcare
9	Pressure relief Damper as per tender specification	SAI/Integromed/Hans Healthcare
10	Automatic Sliding Door as per tender specification	Metaflex/Alvo/Intogromed
11	Single Swing Door for OT	Metaflex/Alvo/SAI
12	Glass Operating board as per tender specification	SAI/Integromed/Hans Healthcare
13	Xray view Box as per tender specification	SAI/Integromed/Hans Healthcare

14	Electrical Installation incl DB with internal wiring and switch socket	Finolex/Legrand/northwest/Havells/polycab/Equivalent
15	Anesthesia pendant	Draeger/Getinge/Integromed
16	Machine Mounted Anesthesia pendant	Draeger/Getinge/Integromed
17	Surgeon Pendant	Draeger/Getinge/Integromed
18	Medical Gas pipeline	Draeger/Gregerson
19	Surgical operating table as per tender specification	Alvo/Getinge/Cognat/integromed
20	Air Handling Unit with ODU	Zeco/VTS/Edgetech
21	OT Integration	Esbee Dynamed Klstroz/Integromed/Advantec
22	OT Light with Medview Camera	Draeger/Integromed/sterix
23	OT Light for Minor OT	Draeger/Integromed/cognat/Hospedia
24	Electronic Anesthesia Machine	Draeger/Siare/Penlon
25	Mechanical Anesthesia Machine	Draeger/Siare/Penlon

OTHER MAKES WHICH MAY ALSO BE USED IN THE WORKS

S.N	Material /Article	Manufacturers/ Agencies /Brand Make
1.	Cement (OPC 43 grade) /PPC	A.C.C., Jaypee Cement, Ultratech, Shri Cement, Gujart Ambuja Cement,
2.	Steel Reinforcement	SAIL, Tisco, RINL, JSW Steel Ltd, JINDAL, Shyam Steel
3.	Structural Steel	SAIL, Tisco, RINL, JSW Steel Ltd, JINDAL, Shyam Steel
4.	Stainless Steel	Jindal SS Ltd (JSL), Salem (SAIL), SAIL (SAIL), Shyam Steel
5.	Factory made Machine pressed laminated flush door shutter	Century, Greenply, Kitply, Duroply Merino
6.	Block Board	Century, Greenply, Kitply, Duroply Merino
7.	Flush Door Shutter	Century, Greenply, Kitply, Duroply Merino
8.	Boiling Water proof plywood, Block board, Commercial Plywood	Century, Greenply, Kitply, Duroply Merino
9.	Aluminium door & window fittings	Jyoti, Argent, Everest
10.	PVC rigid foam sheet	Rajshri or equivalent
11.	Hydraulic Floor Spring	Dorma, Hardwin, Ozone, Dorset
12.	Door Closure	Dorma, Hardwin, Ozone, Dorset
13.	Float Glass	Saint Gobain (Saint Gobain India Pvt. Ltd.) Modiguard (Gujarat Guardian Ltd.) Asahi (Asahi India Glass Ltd.)
14.	SWR uPVC pipe & fitting	Supreme, Finolex, Prince Astral, Prakash, Ashirwad
15.	CPVC Pipe & fittings	Supreme, Finolex, Prince Astral, Prakash, Ashirwad
16.	Ceramic glazed wall tiles	Kajaria, Orientbell, Somany, NITCO, HR-Johnson
17.	Vitrified Tiles	Kajaria, Orientbell, Somany, NITCO, HR-Johnson
18.	Paints	Lewis Berger, Asian Paints, Nerolac, Dulux
19.	Steel/Wood Primer Paints	Lewis Berger, Asian Paints, Nerolac, Dulux
20.	PVC Water Storage Tanks	Sintex, Plasto
21.	P.T.M.T. Accessories	Prayag, Prakash

S.N	Material /Article	Manufacturers/ Agencies /Brand Make
22.	Mirror	Saint Gobain (Saint Gobain India Pvt. Ltd.), Modiguard (Gujarat Guardian Ltd.) Asahi (Asahi India Glass Ltd.), Atul (Autl Glass Industries Ltd.)
23.	Stainless Steel Sink	Hindware, NIRALI, CERA, JAYNA
24.	Sanitary ware /Chinaware	Cera, Parryware, Hindware, Jaquar
25.	C.P. Fittings and accessories for bathroom/toilets	Jaquar, Gem, Parko, Hindware, Cera, Parryware
26.	ACP	Alutuff, Alucobond, Alstrong, Aludecor

5.0 **TRAINING & ANNUAL MAINTENANCE CONTRACT (AMC)**

The contractor shall provide proper training to the representative of Principle Employer for proper operation of the Equipment installed by the contractor, whenever required before completion of DLP period along with handing over of all standard operating procedures, warranty certificates, manuals etc.

The Contractor shall provide 2 years Annual Maintenance Service to the principal employer for the executed work and installed equipment after successful completion & Handing over of the works to Principal Employer. NO additional cost for the training and AMC will be paid to the contractor, hence quote the rate accordingly.

6.0 **PROJECT EXECUTION**

6.1 **Project Execution & Supervision Aspects**

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

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

2. The Project Head/Project Manager Representative on behalf of the Contractor should be authorized with whom day to day interactions shall be made by the Engineer-in-Charge for execution and supervision of works. The candidate should have a thorough understanding and experience with IS code relating to building construction.
3. The Bidder shall provide competent personnel for the project execution and supervision who shall be managed by the Project Head/Project Manager at site in performing the assignment under this Contract.

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

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

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

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

4. The Contractor must be doubly sure about the correctness of the same as per layout plan.
5. It is the duty of the Contractor to:
 - Ensure that high quality of construction is achieved
 - Ensure that all works are carried out in full compliance with the Engineering design, technical specifications and Contract documents;
 - Check / conduct all necessary measurements, tests, and control the quality of various items of work s and in accordance with the relevant code of Building specification with the latest edition.

6.2 Documents Prepared Shall be the Property of the Employer

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

6.3 Drawings

6.3.1 Good for Construction Drawings

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

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

6.3.2 Shop drawings

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

Within the time frame agreed with the Engineer-in-Charge, the Contractor shall prepare shop drawings using latest version of AutoCAD. Shop drawings shall show all layouts, details in plans & sections showing all connections, junctions, bends, supports, clearances. fixing arrangements with dimensions room, etc shall be prepared by the Contractor on AutoCAD based on the architectural drawings and site measurements. All measurable items quantities shall be mentioned on each shop drawing being submitted for approval by the Contractor.

3 sets of shop drawings (soft copy also) shall be submitted for approval and Seven sets of final shop drawings after approval by Engineer-in-Charge shall be submitted by the Contractor along with the soft copy. The shop drawings, shall be prepared as per schedule given in PERT Chart.

Technical submittals of manufacturer's catalogues and technical data shall be submitted for approval. The Contractor shall designate an Engineer responsible for issue and preparation of shop drawings and control of GFC drawings.

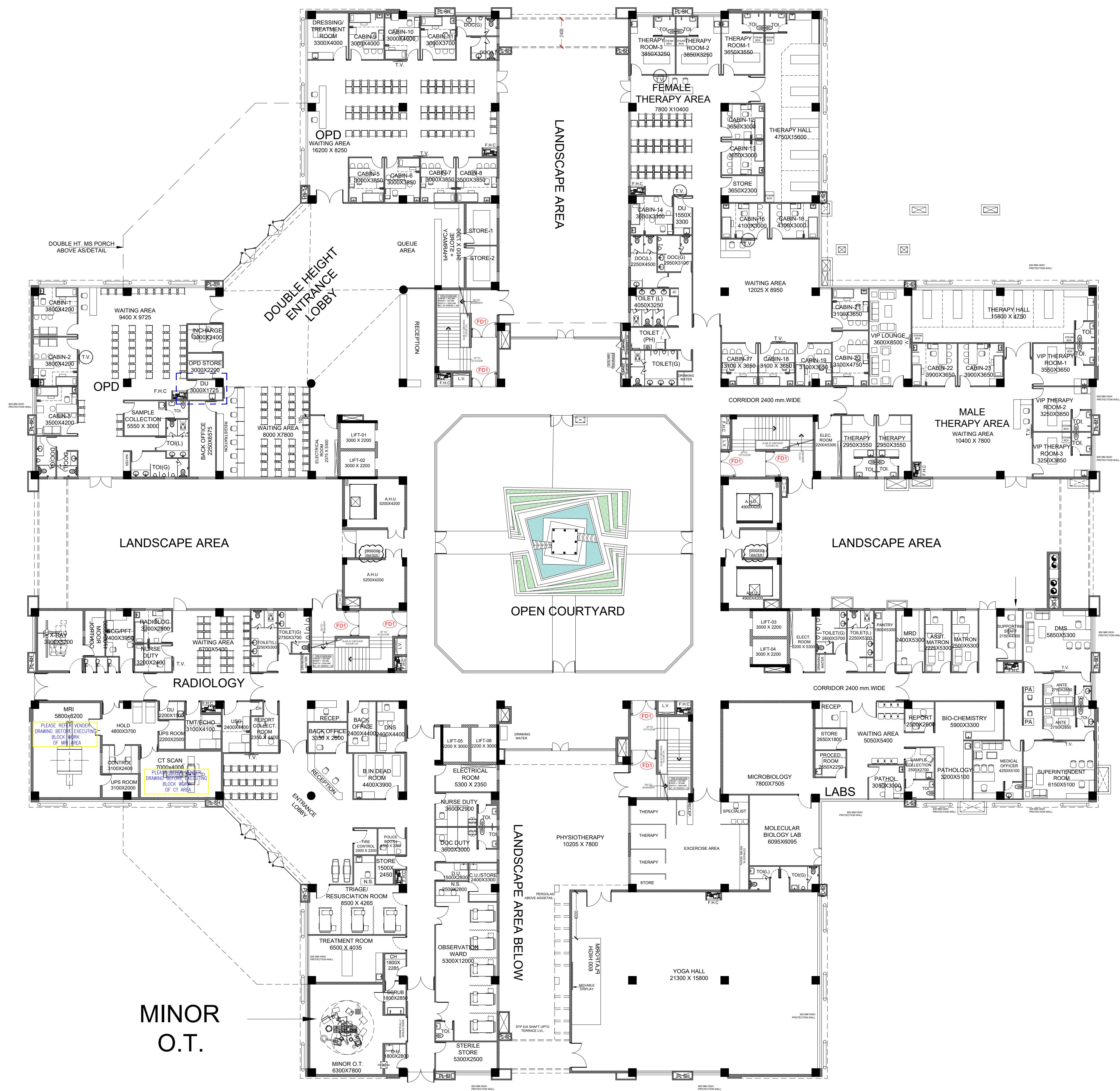
6.4 Testing and Commissioning

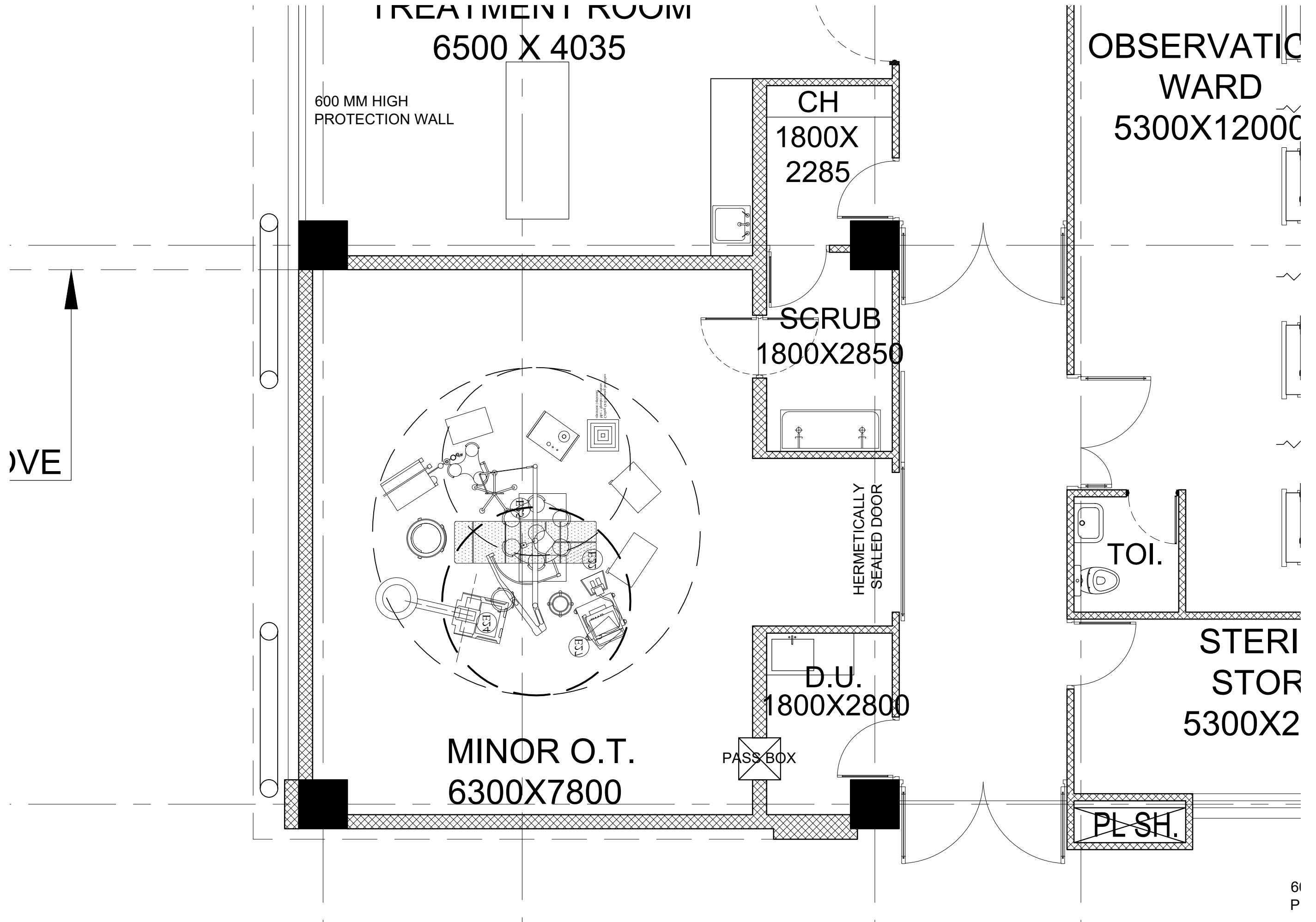
- The Contractor shall arrange electricity at his own cost for testing of the various electrical and mechanical installations as directed by Engineer-in-Charge and for the consumption by the Contractor for executing the work. Also all the water required for testing various electrical installations, fire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

SECTION – VIII

TENDER DRAWINGS

HOSPITAL GROUND FLOOR PLAN



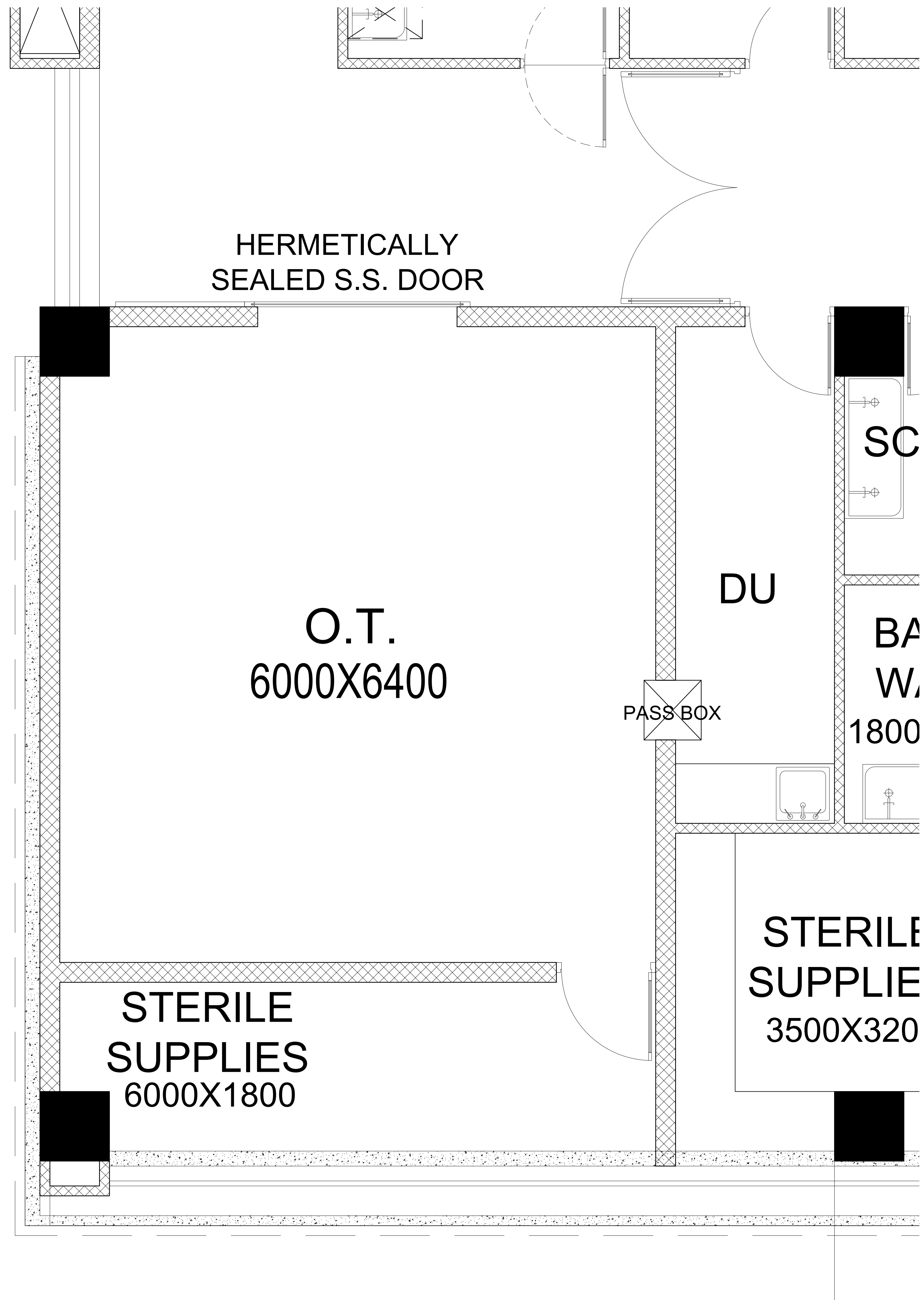


The floor plan illustrates the layout of the 1st floor, featuring a central 'OPEN COURTYARD BELOW' and several 'LANDSCAPE AREA' sections. The plan is divided into several functional zones:

- Top Left:** Includes a 'DOUBLE HEIGHT ENTRANCE LOBBY BELOW' and a '11 BEDDED WARD (16400X3400)'.
- Top Right:** Features a 'WAITING LOUNGE' and a '2400 mm WIDE CORRIDOR'.
- Middle Left:** Contains a 'NICU' (Neonatal Intensive Care Unit), 'TREATMENT ROOM', and 'DOCTOR DUTY'.
- Middle Right:** Includes a 'PANCHAKARMA THERAPY HALL (FEMALE)' and a 'THERAPY ROOM (M)'.
- Bottom Left:** Shows a 'MAJOR O.T.' (Operating Theatre) and a 'SHALAKYA O.T.' (Eye Surgery Theatre).
- Bottom Right:** Features a 'MINOR O.T.' and a 'MAJOR O.T.'.

The plan also includes numerous smaller rooms such as 'NURSE DUTY', 'DOC DUTY', 'NURSERY', 'STORE', 'TREATMENT ROOM', 'PANTY', 'CU', 'DU', 'TOILET', 'ELECTRICAL ROOM', 'LIFT', 'AIR LOCK', and 'ISOLATION'. Corridors are labeled '2400 mm WIDE CORRIDOR'.





SECTION – IX

FINANCIAL PROPOSAL

SUMMARY OF COST FOR PERCENTAGE RATE TENDER

Description	Percentage Quoted (Excess / Less / at par)	Total Amount as per % Quoted (Excluding GST) (Rs.)
ESTABLISHMENT OF MODULAR OPEARATION THEATRES AND ALLIED CIVIL, MEP WORKS FOR NATIONAL INSTITUTE OF AYURVEDA (NIA), PANCHKULA	DO NOT FILL PERCENTAGE HERE	DO NOT FILL COST HERE
Total amount in words: DO NOT FILL COST HERE AS IT IS TECHNICAL PROPOSAL FILE		

Note:-

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

Detailed Bill of Quantities

Bill of Quantity for Major Modular Operation Theatre

SNO.	ITEM Description	Unit	Qty.	Unit Rate	Total Price
1	Execution of Wall Paneling System work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	160	₹ 15,340	₹ 2,454,400
2	Execution of Ceiling Paneling System work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	75	₹ 9,250	₹ 693,750
3	Execution of PVC Flooring for OT work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	100	₹ 6,500	₹ 650,000
4	Execution of Laminar Air Flow and Ac Ducting work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	2	₹ 590,000	₹ 1,180,000
5	Execution of Touch Screen Control Panel work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 490,000	₹ 980,000
6	Execution of Peripheral lights and clean room luminaries work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	16	₹ 3,250	₹ 52,000
7	Execution of Automatic Sliding Door work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 400,000	₹ 800,000
8	Execution of Storage Unit SS304 work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 143,000	₹ 286,000
9	Execution of Pass Box work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 100,000	₹ 200,000
10	Execution of Pressure relief Damper work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 21,000	₹ 42,000
11	Execution of Electrical Installation incl DB with internal wiring and switch socket work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 100,000	₹ 200,000
12	Execution of Glass Operating board work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	2	₹ 40,000	₹ 80,000
13	Execution of Xray view Box work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 60,000	₹ 120,000
14	Execution of Motorised Anesthesia pendant for mounting Anesthesia Machine work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 1,300,000	₹ 2,600,000

15	Execution of Surgeon Pendant work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	2	₹ 500,000	₹ 1,000,000
16	Execution of Medical Gas pipeline Interconnection inside the OT work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 100,000	₹ 200,000
17	Execution of Surgical operating table work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 1,237,000	₹ 2,474,000
18	Execution of Air Handling Unit with Outdoor Unit work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 1,987,600	₹ 3,975,200
19	Execution of ceiling mounted arm to mount Medical grade Mointor work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 900,000	₹ 1,800,000
20	Execution of OR Integration work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 1,500,000	₹ 3,000,000
21	Execution of OT Light with Camera work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 2,500,000	₹ 5,000,000
22	Execution of Electronic Anesthesia mahine mount on pendant work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 5,047,170	₹ 10,094,340
Sub Total					₹ 37,881,690.00
GST @18%					₹ 6,818,704.20
Total Cost of Major OT					₹ 44,700,394.20

Bill of Quantity for Minor Modular Operation Theatre					
SNO.	ITEM Description	Unit	Qty.	Unit Rate	Total Price
1	Execution of Wall Paneling System work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	205	₹ 15,340	₹ 3,144,700.00
2	Execution of Ceiling Paneling System work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	110	₹ 9,250	₹ 1,017,500.00
3	Execution ofPVC Flooring for OT work as per Specification of work mentioned in the Section:VII Scope of Work	Sqm	125	₹ 6,500	₹ 812,500.00
4	Execution of Laminar Air Flow and Ac Ducting work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	3	₹ 590,000	₹ 1,770,000.00
5	Execution of Touch Screen Control Panel work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 490,000	₹ 1,470,000.00
6	Execution of Peripheral lights and clean room luminaries work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	22	₹ 3,250	₹ 71,500.00
7	Execution of Automatic Sliding Door work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 400,000	₹ 1,200,000.00
8	Execution of Single Swing Door for O'T work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 150,000	₹ 300,000.00
9	Execution of Storage Unit SS304 work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 143,000	₹ 429,000.00
10	Execution of Pass Box work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	2	₹ 100,000	₹ 200,000.00
11	Execution of Pressure relief Damoer work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 21,000	₹ 63,000.00
12	Execution of Electrica l Installation incl DB with internal wiring and switch socket work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	3	₹ 1,000,000	₹ 3,000,000.00

13	Execution of Glass Operating board work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 40,000	₹ 120,000.00
14	Execution of Xray view Box work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 60,000	₹ 180,000.00
15	Execution of Anesthesia pendant work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 575,000	₹ 1,725,000.00
16	Execution of Surgeon Pendant work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 550,000	₹ 1,650,000.00
17	Execution of Medical Gas pipeline Interconnection inside the OT work as per Specification of work mentioned in the Section:VII Scope of Work	LOT	3	₹ 75,000	₹ 225,000.00
18	Execution of Surgical operating table work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 1,237,000	₹ 3,711,000.00
19	Execution of Air Handling Unit with Outdoor Unit work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 1,500,000	₹ 4,500,000.00
20	Execution of OT Light for Minor OT work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 1,349,057	₹ 4,047,171.00
21	Execution of Mechanical Anesthesia Machine Trolley Mounted work as per Specification of work mentioned in the Section:VII Scope of Work	Nos.	3	₹ 3,745,283	₹ 11,235,849.00
Sub Total					₹ 40,872,220.00
GST @18%					₹ 7,356,999.60
Total Cost of Minor OT					₹ 48,229,219.60