# GOVT. OF RAJASTHAN MEDICAL EDUCATION DEPARTMENT

# APPOINTMENT OF DESIGN & ARCHITECTURAL CONSULTANT

for

"Comprehensive Master Planning, Detailed Architecture, Design Engineering Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities

at **District Pali, Rajasthan**"



HSCC (INDIA) LTD (CONSULTANTS & ENGINEERS FOR MEGA HOSPITALS & LABORATORIES) E-6(A), sector-1, NOIDA(U.P) 201301 (India)

Phone: 0120-2542436-40 Fax: 0120-2542447

Tender No. HSCC/Pali- Raj/MC/RFP/2015

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#### **Disclaimer**

HSCC (I) Ltd. has prepared this tender document on behalf of Medical Education Department, Govt. of Rajasthan. The purpose of this tender document is to provide shortlisted and interested parties with information to assist in preparation of their bid.

This tender document is applicable to all eligible Bidders meeting minimum pre-qualification criteria for "Appointment of Design Consultant for Comprehensive Master Planning & Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali, Medical Education Department, Govt. of Rajasthan". The information is provided under the terms and conditions set out in this Tender Document and any other terms and conditions related to such information.

While HSCC has taken due care in preparation of the information contained herein, and believe it to be complete and accurate, neither them nor any of their authorities or agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the exhaustiveness/ completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

Respondents to this tender document 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 tender document.

This tender document is neither an agreement, nor an offer or invitation to perform work of any kind to any party.

HSCC (India) Ltd./Client reserves the right not to proceed with the Project or to change the configuration of the Project, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the Project further with any respondent.

No reimbursement of cost of any type on any account will be paid to persons or entities submitting their Bid.

#### **Definitions**

- 1) "Application" shall mean the response submitted by interested parties to the "Invitation to EOI" published by HSCC for this project on behalf of Medical Education Department Govt. of Rajasthan.
- 2) "Architectural Fee" shall mean the fee to be paid to the Design Consultant for providing services for the Project as per the scope of works mentioned in the Contract.
- 3) "Bid" shall mean the signed offer submitted by the Bidder in response to this Request for Proposal herein after referred as tender document.
- 4) "Bidder (s)" shall mean all eligible parties participating in the bidding process pursuant to and in accordance with the terms of the tender document.
- 5) "Bid Security" shall mean the amount to be deposited by the Bidders with the Bid as per clause 2.5.7
- 6) **"Bid Validity"** shall mean the period for which the Bids shall remain valid as per clause 2.5.8.
- 7) "Client" shall mean Medical Education Department, Govt. of Rajasthan its authorized agencies and assignees.
- 8) "PMC" shall mean 'Project Management Consultant' i.e. HSCC (I) Ltd., on behalf of Medical Education Department, Govt. of Rajasthan
- 9) "Contract Agreement" shall mean the agreement to be signed between the Successful Bidder and the Client for execution of the Project.
- 10) "Architect" shall mean any entity or persons or association of persons who have been short-listed to submit their proposals as Design & Architect Consultant that may provide the Services under the Contract.
- 11) "Evaluation Committee" shall mean the committee constituted by Client/HSCC for evaluation of the bids.
- 12) "HSCC" shall mean HSCC (India) Limited having its corporate office at E-6(A), Sector-1, Noida-U.P. 201501, who have been appointed by Medical Education Department, Govt. of Rajasthan as Project Management Consultants for the project who will oversee the work of Architect for which this tender document has been invited and assist client in selection of Architect.
- 13) "Implementation Agency" shall mean the agency selected for the construction 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali for Medical Education Department, Govt. of Rajasthan.
- 14) "LOA" Letter of Award shall mean the letter issued by the Client to the Successful Bidder inviting him to sign the Contract Agreement
- 15) "Performance Security" shall mean the amount to be paid by the Successful Bidder as per clause 3.5 of TENDER DOCUMENT.
- 16) "Project" shall mean "Construction 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with all other associated facilities at District Pali, Rajasthan for Medical Education Department, Govt. of Rajasthan" for which this tender document has been issued for appointment of Design Consultant for providing Comprehensive Master Planning.
- 17) "Tender Document" shall mean this document issued by Client/ HSCC to eligible Firms for inviting Bids for appointment of Design Consultant for the Project.
- 18) "Site" shall mean the place where the location of the Medical College & Hospital where the facilities and services as mentioned under the scope of work for the Project are to be developed and the details of which are provided in this tender document.

- 19) "Start of Work" shall mean the date of commencement of works by the Architect as defined in clause 1.2 of Notice Inviting Bid.
- 20) "Successful Bidder" shall mean the Bidder declared successful for issue of LOA as per Clause 2.7.1 and who has been invited by HSCC/Medical Education Department, Govt. of Rajasthan, to sign the Contract Agreement.
- 21) "Tender Processing Fee" shall mean the amount to be paid by the Bidders with the Bid as per clause 2.5.4
- 22) "DLP" shall mean Defect Liability Period.
- 23) "Assignment" means the work to be performed by the Architect pursuant to the Contract.
- 24) "Authorized Representative" shall mean the representatives of "Consultant", Client and/or "Architect" as the case may be who are duly empowered and authorized by their respective organizations to act for and on their behalf.
- 25) "Services" shall mean the services to be provided by the Architect as per the scope of work for the Project
- 26) "Parties" shall mean Client and Architect, each one individually referred to as Party.
- 27) "Proposal" shall mean the Proposal submitted by the Architect with the tender document.

# (Section I)

**Notice Inviting Bid** 

## SECTION -1 NOTICE INVITING BID

#### 1.1 General

HSCC (I) Limited on behalf of Medical Education Department, Govt. of Rajasthan invites sealed Bids from eligible reputed Bidders for "Appointment of Design & Architectural Consultant for Comprehensive Master Planning, conceptual & Detailed Planning, architectural planning, detailed design engineering for Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali for Medical Education Department, Govt. of Rajasthan" on fixed percentage fee basis on quality based selection (QBS).

#### 1.2 Important Information

Bid Security amount	Rs. 5,00,000/- (Rupees Five Lakhs only)
Tender Processing Fee	Rs 10,000 (Rupees Ten thousands only) to be paid
(Non-refundable)	through a Demand Draft in favour of HSCC(I) LTD,
,	payable at NOIDA/New Delhi
	,
Issue of TENDER DOCUMENT documents	10.11.2015
Last date for submission of queries	16.11.2015
Pre Bid Conference	17.11.2015 at 11.30 Hrs. at HSCC (I) Ltd., E-6(A),
	Sector-1, NOIDA- 201 301, (U.P.), India
Last Date & time of Submission of Bids	30.11.2015 up to 15.00 Hrs. at HSCC (I) Ltd., E-6(A),
(Bid due date)	Sector-1, NOIDA- 201 301, (U.P.), India
Date & time of opening of Bids	30.11.2015 at 15.30 hrs.
Dates for Bidders to make presentations to the	To be intimated later
Evaluation Committee	
Date and time of submission of	2 weeks from issue of LOA
performance security	
Date and Time of signing of Contract	3 weeks from issue of LOA
Agreement	
Commencement of work	15 days from the date of issue of LOA
Completion period of the Work	3+15+2= 20 Months (including pre-construction+
	construction + post construction period)
Bid Validity	180 days from date of submission of bid
Address for Communication	Chief General Manager
	HSCC(I) LTD
	E-6(A), Sector- 1 Noida-201 301 (U.P)
	Telephone No. 0120-2542436-40
	Fax: 0120-2542447

#### 1.3 Significant Points

- 1.3.1 Tender Document consists of:
  - Notice Inviting Bid
  - Instructions to Bidders (Including Annexure)
  - Terms of reference
  - Evaluation Process & Criteria
  - General Conditions of Contract (GCC)
  - Requirements and Scope of Services
  - Site Plan
- 1.3.2 The Contract shall be governed by the document listed in Para 1.3.1 above and relevant standards and specifications, which are available commercially.
- 1.3.3 Bidders may obtain further information in respect of these tender document from the office of the Chief General Manager, HSCC(I) Ltd., E-6(A), sector 1, Noida- 201 301 and during the pre bid conference to be held as per clause 1.2 above.
- 1.3.4 All Bidders are hereby cautioned that Bids containing any material deviation or reservation as described in Clause 2.6.2 of "Instructions to Bidders" shall be considered as non-responsive and shall be summarily rejected.
- 1.3.5 The Client reserves the right to accept or reject any or all Bids without assigning any reason. No Bidder shall have any cause of action or claim against the rejection of his Bid.

Chief General Manager, HSCC (I) Ltd., E-6(A), Sector- 1, Noida 201301, On behalf of Medical Education Department, Govt. of Rajasthan. (Section II)

**Instruction to Bidders** 

#### **SECTION-II**

#### **INSTRUCTIONS to BIDDERS**

#### 2.1 Important Points

- a. Pre Bid conference shall be held on 17.11.2015 at 11.30 Hrs. at HSCC (I) Ltd., E-6(A), Sector-1, NOIDA-201301 (U.P.), India.
- b. Date and time of opening of Bid (Clause 1.2 of Notice Inviting Bids) is 30.11.2015 at 1530 hrs
- c. Bid Security as per the Clause 1.2 of Notice Inviting Bids is Rs. 5,00,000 (Rupees Five lakhs only) to be submitted with the tender document.
- d. Period for which the Bid is to be kept valid (Clause 2.5.8), **180 days** from the last date for submission of Bid.
- e. Date of Start of Work, 15 days from the date of issue of LOA.
- f. Period of completion –

(a) Stage 1 (Pre-construction) - 3 month from the date of start.
 (b) Stage 2 (Construction) - 15 months after Stage 1.
 (c) Stage 3 (Post Construction) - 2 Months after stage 2.

g. Validity Period for Performance Security (Form C) 6 months from the date of completion of the project

#### 2.2 Eligibility to bid

#### Minimum Pre Qualification Criteria:-

The Architect and Design/ Engg (A & D OR A & E) Consultant firm should have experience of successfully completed assignment of comprehensive architectural and engineering consultancy services during the last 7 (seven ) years ending last day of submission of bids should be either of the following:

(i) Three similar completed works costing (Construction Cost) not less than the amount equal to 40% of estimated project cost of Rs. 139 Cr. for consultancy work.

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(ii) Two similar completed works costing (Construction Cost) not less than the amount equal to 50% of the estimated project cost of Rs. 139 Cr. for consultancy work.

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- (iii) One similar completed work costing (Construction Cost) not less than the amount equal to 80% of the estimated project cost of Rs. 139 Cr. for consultancy work.
- a. "Similar work" shall mean Project with Medical College and Hospital.
- b. For evaluation purpose, the completion cost of works mentioned in the Completion Certificate shall be enhanced by 7% per annum till the end of month prior to date of NIT.
- c. The experience certificate should be issued by office not below the rank of Executive Engineer/Project Manager/Unit Head.
- d. Bidders must have average Annual Financial Turnover for last three consecutive financial years ending 31.3.2015 from 'Design & Engineering services' should not be less than Rs. 3.0 Crs. (Rupees Three Crore). Copies of Balance sheet/Certificate duly certified by from Chartered Accountants to be submitted.

- e. One of the Director/Partner/Proprietor of company should be registered with 'Council of Architecture' & should have minimum Fifteen years of experience in the field of architectural & consultancy work.
- f. Proprietorship /Partnership deed/ Memorandum and Articles of Association of the firm and their details are to be submitted.
- g. Copies of Sales Tax/ Work Contract Tax Registration Certificate/Service tax registration certificate (as applicable) and PAN of income tax and registration certificate with Council of Architecture etc are to be submitted.
- h. Bidder shall require to furnish details of Skilled and Trained Manpower Including Engineers, Architects and Technical staff employed and detail of software and hardware etc available with the consultant

Bids of the Bidders who do not meet above eligibility criteria will be rejected summarily and will not be further for technical evaluation.

#### 2.3 Disqualification

Even if a Bidder meets the above criteria, Client/HSCC may order disqualification of the Bidder if

- a. The Bidder has:
  - i. made misleading or false representations in the forms, statements and attachments submitted:
  - ii. The Bidder has been blacklisted and/or debarred by any government agency.
  - iii. Submitted more than one Bid

#### 2.4 Tender Documents

#### 2.4.1 Contents of tender document

Tender document shall consist of the documents listed in Clause 1.3.1 of Notice Inviting Bids along with any schedule, addendum or corrigendum etc. issued by Client/HSCC for the purpose.

#### 2.4.2 Pre-Bid Conference

HSCC/ Client shall conduct a pre-bid meeting at the time and venue mentioned in Clause 1.2 of Notice Inviting Bid to answer any queries the Bidders may have in connection with the Project and to give them relevant information regarding the same.

#### 2.4.3 Clarifications

Bidders can seek clarifications to the tender document by writing at the mailing address indicated in Clause 1.2 of Notice Inviting Bid or by tele-fax. HSCC will respond in writing to any request for clarification which is received prior to the deadline mentioned in Clause 1.2 of Notice Inviting Bid. Written copies of the response (including an explanation on the queries but without identifying the source of the inquiry) will be sent to all prospective Bidders who have received the tender document. Only written communications/clarifications can be considered as valid.

#### 2.4.4 Amendments to the tender document

i. At any time prior to the deadline for submission of the Bids, HSCC/ Client may, for any reason, whether at its own initiative or in response to a clarification or query raised by a prospective Bidder, modify the tender document by an amendment notice.

- ii. The said amendment in the form of an addendum/ corrigendum will be sent to all prospective Bidders who have received the Tender Document. This communication will be in writing or by Telefax/ e-mail and the same shall be binding upon all Bidders. Prospective Bidders should promptly acknowledge receipt thereof by Tele-fax to the HSCC.
- iii. In order to allow Bidders reasonable time for preparing their Bids after taking into account such amendments, the HSCC/Client may, at its discretion, extend the deadline for submission of the Bids.

#### 2.5 Preparation of Bid

#### 2.5.1 Bidders responsibility

- i. The Bidder is solely responsible for preparation of Bids and details therein.
- ii. The Bidder is expected to examine carefully all the contents of Tender Document as mentioned in Sub-clause 1.3.1 of Notice Inviting Bids including instructions, conditions, forms, terms, Client's requirements etc and factor the same into his Bid. Failure to comply with the requirements as detailed in these documents shall be at the Bidders own risk. Bids which are not responsive to the requirements of Tender Document will be rejected.
- iii. The Bidder shall be deemed to have inspected the Site and its surroundings and taken into account all relevant factors pertaining to the Site in the preparation and submission of the Bid.
- iv. The Bidder shall bear all costs associated with the preparation and submission of his Bid and HSCC/Client will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Bidding process.

#### 2.5.2 Project Inspection and Site Visit

- i. The Site information including site plan given in this Tender Document is for guidance only. The Bidder is advised to visit and examine the Site and its surroundings at his/their own cost and obtain all information that they may deem necessary for preparing the Bid and executing the Project. Bidders can obtain information from HSCC/Client regarding contact persons for the site visit. Any expenditure towards site visit etc shall be borne by the bidders at his/their own cost.
- ii. HSCC shall not be liable for such costs, regardless of the outcome of the selection process and no reimbursement of whatsoever nature in this regard shall be made.

#### 2.5.3 Documents Comprising the Bid

Besides document requirements indicated in Clause 2.2, bid shall comprise the following:

#### (A) TECHNICAL PACKAGE

The Technical package, clearly labelled as "TECHNICAL PACKAGE", has to be submitted in two parts, Part-I shall consist of information conforming responsiveness and other information from bidders as required under this Tender Document and Part – II shall consist of the Technical Bid. Technical Evaluation of those bidders will only be done who meets the Minimum Pre Qualification Criteria specified in Clause 2.2 above.

#### I) Part-I shall comprise the following:

- a. Covering letter for the Bid
- b. Checklist for the enclosed documents as per the format attached as Annexure 1
- c. Demand Draft for Tender Processing Fee
- d. Bank Guarantee, as per the format attached as Form 'B', towards Bid Security in original in a separate envelope, sealed and duly marked "Bid Security".
- e. Power of Attorney as Performa 'D' (in favour of the authorized signatory of the Bidder)

to submit the Bid.

f. Initialled Tender Document as listed in Clause 1.3.1 of Notice Inviting Bids

#### II) Part – II shall comprise the followings:

#### (a) Technical Bid

The Bid be prepared keeping in mind the evaluation criteria defined in section IV and should cover in detail the following:

- 1. Master Planning (in scale 1:500)
  - i) Site layout plan (Concept stage)
  - ii) 3- Dimensional view
  - iii) Parking plan
  - iv) Movement plan
  - v) Landscape plan
  - vi) Zoning Plan including infrastructure plan
- 2. Building Plans
  - i) Concept Floor Plans in scale 1: 200 for all buildings
  - ii) Elevation/ Sections minimum one for important buildings
  - iii) 3-D views of important buildings
- 3. Model (in scale 1:1000) in sealed box (TO BE SUBMITTED AT THE TIME OF PRESENTATION)
- 4. Budgetary Estimate (based on Rajasthan PWD Rates & Works Manual as applicable)
- 5. Details of Measures to be taken for Energy efficiency/ Green Building Concept for at least 3 star GRIHA rating.
- 6. CVs of key staff for this Assignment.

#### **ABOUT SITE:**

The site is located at the District Pali, Rajasthan. The existing district hospital is 330 bedded hospital which is presently under up-gradation. Medical Education Department, Govt. of Rajasthan has acquired additional land of approximately 36 acres, nearly 8 Km away from the district hospital on NH-62. An indicative site plan of district hospital campus and additional land acquired in PDF format is enclosed with the Tender Document. The enclosed site plans are for reference purpose only and for planning and design of the campus, actual measurement needs to be done at site.

#### Note:

- 1. List of documents has been prepared mainly for the convenience of the Bidders and any omission on the part of HSCC/Client shall not absolve the Bidder of his responsibility of reading and understanding various clauses in the Tender Document including the specifications and to submit all the details specifically called for (or implied) in those clauses.
- 2. All documents issued for the purposes of Bidding as described in Clause 1.3.1 of Notice Inviting Bids, and any amendments issued in accordance with Clause 2.4.4 shall be deemed as incorporated in the Bid.
- **3.** A model of the design shall be submitted in a sealed box (TO BE SUBMITTED AT THE TIME OF PRESENTATION). HSCC/Client will have no responsibility in case the model is broken/ damaged during transportation.

#### 2.5.4 Tender Processing Fees

The Bidder shall pay a Tender Processing Fee of Rs 10000.00 (Rupees ten thousand only). Tender Processing Fee shall be enclosed along with Technical Package and shall be payable through a demand draft (non-refundable) drawn in favor of "HSCC(I) LTD", payable at NOIDA/New Delhi. Any bid not accompanied by the Tender Processing Fees shall be rejected and shall not be considered for further evaluation / selection.

#### 2.5.5 Language of Bid

The Bid and all related correspondence and documents relating to the Project shall be written in the English language. Supporting documents and printed literature furnished by the Bidder, if any, may be in another language provided they are accompanied by an accurate English translation. 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.

#### 2.5.6 Currency of Bid

All the payments for the project shall be made in Indian Rupees only.

#### 2.5.7 Bid Security

- i. The Bidder shall furnish, as Bid Security, an amount as mentioned in Clause 1.2 of Notice Inviting Bids.
- ii. The Bid Security will be in the form of a Bank Guarantee from a Scheduled Commercial Bank in India acceptable to the Client. The format of the Bank Guarantee shall be as per Form 'B' provided in this Tender Document. The said Bank guarantee shall be irrevocable and operative for a period not less than 30 days beyond the validity of the Bid (i.e. 210 days from the last date of submission of Bids as per clause 1.2 of Notice Inviting Bid or extended date thereof). The Bid Security shall be endorsed/pledged in favour of HSCC (I) Ltd and shall be submitted in a separate envelope super-scribed Bid Security for "Appointment of Design & Architect Consultant for Comprehensive Master Planning & Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at Pali, Rajasthan for Medical Education Department, Govt. of Rajasthan".
- iii. Any Bid not accompanied by an acceptable Bid Security shall be treated as non-responsive and shall be summarily rejected.
- iv. The Bid securities of unsuccessful Bidders shall be discharged/ returned within one month of signing of the contract with Successful Bidder.
- v. The Bid Security of the Successful Bidder shall be returned upon the Successful Bidder executing the Contract Agreement with the Client and on submission of Performance Security, as mentioned in Clause 3.5 of Terms of Reference (TOR).
- vi. The Bid Security shall be forfeited:
  - a. If a bidder withdraws his Bid during the period of Bid Validity, or
  - b. In the case of the Successful Bidder if:
    - I. the necessary Performance Security for performance is not furnished as per Clause 3.5 and/or
    - II. the Contract is not signed within the time limit specified in Clause 2.7.2
  - c. If the Bidder tries to influence the Bid process/ employees of HSCC/ members of Evaluation Committee in any manner or breaches standards of ethics as per Clause 26.0 of GCC.

#### 2.5.8 Bid Validity

Bids shall be valid for a period as specified in Clause 1.2 of Notice Inviting Bids. HSCC/ Client reserve the right to reject any Bid, which does not meet the requirement.

#### 2.5.9 Extension of Bid Validity

Prior to expiry of the original Bid Validity Period, HSCC/Client may request Bidders to extend the Bid Validity Period for a specified additional period.

#### 2.5.10 Format and Signing of Bid

- i. Bid document (Technical proposal Part I and II) shall be stamped, signed and numbered on all pages by a person duly authorized to sign the Bid document. The Bidders shall also submit a power of attorney authorizing the person signing the document in accordance with Clause 2.5.16 of the Instruction to Bidders.
- ii. Entries to be filled in by the Bidder shall be typed or written in indelible ink.
- iii. The Bid shall be without alterations, overwriting, interlineations or erasures except those to accord with instructions issued by HSCC (I) Ltd or as necessary to correct errors made by the Bidder. All amendments/corrections shall be initialled by the person or persons signing the Bid.
- iv. All witnesses and sureties shall be persons of status and probity and their full names, occupations and addresses shall be written below their signatures.

#### 2.5.11 Sealing and Marking of Bids

- i. Each Bid will be submitted in two sets one marked "Original" and the other marked "Copy" (Copy should be the photocopy of 'original').
- ii. Each set containing the two parts, TECHNICAL PACKAGE part I and part II shall be sealed in two separate envelopes clearly marked as "Original" and "Copy". The two envelopes shall be wrapped in an outer envelope addressed to The Chief General Manager, HSCC (India) Ltd., E-6/A, Sector 1, Noida 201301 (UP), duly super-scribing on top, name of work "Appointment of Design & Architect Consultant for Comprehensive Master Planning & Construction of Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities with other Facilities at Medical Education Department, Govt. of Rajasthan", and last date and time of submission. The envelope should also bear the name and address of the Bidder.
- iii. The contents of Technical Proposal shall be as detailed under Clause 2.5.3 herein.
- iv. No responsibility will be accepted by the HSCC/ Client for misplacement of the bids that are not sealed or marked as per aforesaid instructions.

#### 2.5.12 Submission of Bids

i. Bids should be submitted to:

The Chief General Manager, HSCC (I) LTD, E-6(A), Sector- 1, Noida (U.P.), 201 301.

- ii. The last date for submission of completed Bids is given in Clause 1.2 of Notice Inviting Bids. The HSCC/Client may, at their discretion extend this date, in which case all rights and obligations of the HSCC/Client and the Bidder shall thereafter be subject to the new deadline as extended. If such nominated/ extended date for submission of Bid is subsequently declared as a Public Holiday, the next official working day shall be deemed as the date for submission of Bid.
- iii. Bids shall be submitted by hand or through registered post or courier service at the address mentioned above. HSCC/Client shall not take any cognizance and shall not be responsible

for delay/loss in transit or non-submission of the Bid in time.

iv. Bids sent telegraphically or through other means of transmission (Tele-fax etc.), which cannot be delivered in a sealed envelope, shall be treated as defective, invalid and shall stand rejected.

#### 2.5.13 Modifications/ Substitution/ Withdrawal of Bids

- i. The Bidder may modify, substitute, or withdraw his submitted Bid after submission, provided that written notice of the modification, substitution, or withdrawal is received by HSCC on or before the last date and time for submission of Bids. No Bid shall be allowed to be modified, substituted, or withdrawn by the Bidder in any manner whatsoever thereafter.
- ii. The modification, substitution, or withdrawal notice shall be prepared, sealed, marked, and delivered on or before the last date for submission of Bids in accordance with Clause 2.5.10 and 2.5.11, with the envelopes being additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL", as appropriate. In case of complete substitution or withdrawal, the earlier document shall be returned unopened at the time of opening of Bids.

#### 2.5.14 Bid Due Date

- Bids should be submitted before the stipulated date and time as specified in Clause 1.2 of Notice Inviting Bids.
- ii. HSCC/Client may at its sole discretion, extend the Bid due date by issuing an addendum in accordance with Clause 2.4.4.

#### 2.5.15 Late Bids

Any Bid received after the deadline prescribed for submission of Bids in Clause 1.2 of Notice Inviting Bids herein will be returned unopened to the Bidder.

#### 2.5.16 Power of Attorney

i. Bidders shall submit a Power of Attorney as per perform 'D', duly notarized and on a stamp paper of an appropriate value, in favour of the person signing the Bid documents. The said authority shall also include authority to make corrections/ modifications and interacting with HSCC/Client and for acting as the contact person along with Part 1 of the technical Bid.

#### 2.6 Bid Opening and Evaluation

#### 2.6.1 Bid Opening

- i. The Bids will be opened in the presence of the Bidders or their representatives who choose to attend on the date & time as mentioned as per Clause 1.2 of Notice Inviting Bids in the HSCC (I) Ltd., NOIDA Office. If such nominated date for opening of the Bid is subsequently declared as a public holiday, the next official working day shall be deemed as the date of opening of the Bid.
- ii. Bids for which acceptable notices of withdrawal have been submitted in accordance with Clause 2.5.13 shall not be opened.
- iii. On opening of Technical Proposal envelope, the Bids will be examined to see if they are complete, and contain all documents as mentioned in clause 2.5.3. If the documents do not meet the requirements of the Tender Document, a note will be recorded accordingly and the said Bidder's Proposal will not be considered for further processing/evaluation.
- iv. The Bidders name, the presence or absence of the requisite amount of Bid Security and such other details as HSCC or their authorized representative, at his discretion, may consider

appropriate will be announced at the time of Bid opening.

- v. In the event of any discrepancy between the copies of the proposal, the original shall govern. The original and each copy of the technical proposal shall be prepared in indelible ink and shall be signed by the bidders authorized representative. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposal. The authorized person or persons signing the proposal shall initial all pages of the proposal.
- vi. The proposal shall contain no interlineations or overwriting except as necessary to correct errors made by the bidders themselves. The authorized person or persons signing the proposal shall initial any such corrections.
- vii. The proposals shall be valid for a period of 180 days from the last date of its submission. During this period, the bidder shall keep available the professional staff proposed for the assignment.

#### 2.6.2 Evaluation of Bids

- i. HSCC/Client would subsequently examine and evaluate Bids in accordance with the criteria set out in Section IV.
- ii. HSCC/Client reserves the right to reject any Bid if:
  - a. At any time, a material misrepresentation is made or uncovered; or
  - b. The Bidder does not respond within the stipulated time to requests for supplemental information required for the evaluation of the Bid.
- iv. HSCC/Client reserves the right to relax evaluation criteria as it deemed fit.

#### 2.6.3 Clarification of Bids

Evaluation of technical proposal submitted by Bidders shall be undertaken based on the details submitted in the technical proposal only. Bidder shall not be allowed to submit on their own, additional information or material subsequent to the date of submission and such material if submitted will be disregarded. It is therefore, essential that all the details are submitted by the Bidder accurately and specifically in their technical proposal avoiding ambiguous answers. However, HSCC/Client reserves the right to seek any clarification from Bidders for details submitted with technical proposal.

#### 2.6.4 Confidentiality

- i. Except the public opening of Bid, information relating to the examination, clarification, evaluation and comparison of Bids and recommendations concerning the award of the Contract shall not be disclosed to Bidders or other persons.
- ii. Any effort by a Bidder to influence the members of Evaluation Committee in the process of examination, clarification, evaluation and comparison of Bids and in decisions concerning award of contract, shall result in the rejection of their Bid.

#### 2.7 Award of Contract

#### 2.7.1 Notification of Award

i. Prior to the expiry of the period of Bid Validity, HSCC/Client will notify the successful Bidder by Tele-fax or by e-mail, to be confirmed in writing by registered post/ by courier. This letter (hereinafter and in the Conditions of Contract called 'the Letter of Award') shall mention the fee to be paid to the Architect in consideration of the work performed by the Architect as prescribed by the Contract (hereinafter and in the conditions of Contract called 'The Architectural Fee') to the satisfaction of Client. No correspondence will be entertained by HSCC/Client from the unsuccessful Bidders.

- ii. The Letter of Award shall constitute a part of the contract.
- iii. Upon submission of Performance Security by the successful Bidder as per clause 3.5, HSCC will promptly notify the unsuccessful Bidders and discharge / return their Bid securities.

#### 2.7.2 Signing of Agreement

- i. Client shall prepare the Agreement in the Proforma (Form E) included in this Document, duly incorporating all the terms of agreement between the two parties. Within 3 weeks from the date of issue of the Letter of Award, the successful Bidder will be required to execute the Contract Agreement.
- ii. The Successful Bidder shall submit Performance Security within a period of 2 weeks from the date of issue of the Letter of Award
- iii. One copy of the Agreement duly signed by the Client and the Architect through their authorized signatories will be supplied to the Architect.
- iv. In case Successful Bidder does not sign the Contract with in stipulated time, Client reserves the right to retender the project.

#### 2.8 Employment of Officers/ Retired Officers of HSCC/Client

The Bidder(s), either at Proposal stage or during the execution stage shall not employ or attempt to employ any staff from current or past employees including retired employees of HSCC/Client in any capacity unless such employee has completed at least two years post retirement/ resignation or had obtained a 'No Objection Certificate' specific to this effect from HSCC/Client as the case may be.

#### 2.9 Right to accept any Bid and to reject any or all Bids

Notwithstanding anything above, HSCC/Client reserves the right to accept or reject any Bid at any time prior to award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders about the grounds for HSCC/Client's action.

HSCC/Client reserves the right to cancel/annul the selection process, at any stage prior to the award of the Contract, in larger public interest, on account of the following:

- a. in case no Bid is received,
- b. occurrence of any event due to which it is not possible to proceed with the selection process
- an evidence of a possible collaboration/mischief on part of Bidders, impacting the competition, objectivity and transparency of the selection process,
- d. It is discovered that Bidders have breached standard of ethics as per GCC clause 26.0, or
- e. any other reason, which in the opinion of the Client necessitates the cancellation of the selection

On occurrence of any such event, HSCC shall notify all the Bidders within 7 days of such decision. HSCC shall also promptly return the Bid Security submitted by the Bidders within 15 days of issue of such notice. HSCC is not obligated to provide any reason or clarification to any Bidder on this account. HSCC's liability under this clause is restricted to returning the Bid Security and no other reimbursements of costs/ expenses of any type shall be made on this account.

The Client further reserves the right to re-tender the process or get the work done by a Government agency or Quasi Government agency if the Client is of the opinion that the bids received are not economically or otherwise feasible or not acceptable due to reasons in sub clauses (a) to (e) above.

# (Section III) Terms of Reference

### SECTION- III TERMS OF REFERENCE

#### 3.1 Purpose of the Assignment

Medical Education Department, Govt. of Rajasthan intends to select an Architect for providing "Design Consultancy services for Comprehensive Master Planning & Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali for the Medical Education Department, Govt. of Rajasthan".

The Architect shall be associated with the HSCC/ Client from concept to commissioning stage and shall be responsible for services as mentioned in the scope of work as per clause 3.2 of Terms of Reference.

#### 3.2 Brief Scope of work

The Architect shall provide Comprehensive Master Planning & Building Design including obtaining statutory and local body approvals for the proposed Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali, Rajasthan for the Medical Education Department, Govt. of Rajasthan. The architect shall be involved through the entire duration of the project till commissioning/handing over of the facilities and during the defect liability period. Detail requirements are given in Section VI of this Tender Document. The requirements and the scope of services given in section VI of this Tender Document are tentative. The Client reserves the right to increase/ curtail the scope of detail requirements.

The Architect shall be responsible for adhering to all requirements of MCI for 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities. The Architect shall be responsible for all but not limited to the following services for the Project:

#### **Stage I- Pre-Construction**

- Preparation of Master Plan, concept plans and obtaining its approval from client.
- Preparation of concept report & Detailed Project Report (DPR) including obtaining approval of client.
- Medical College & Hospital planning based on functional analysis and workflow analysis
  including preparation of architectural brief and space programming, design concept, concept
  for all services including site survey, geotechnical investigation etc.
- The Architect should get the concurrence / approval of the Client for the Master Plan/layout plan and conceptual drawings before preparation of detailed drawings.
- Preparation of all architectural & services planning/drawings for approval of local authorities & obtaining all statutory approvals required at Pre-Construction stage include Environment Impact Assessment Study (EIA) & clearance.
- Preparation of Tender documents including Pre-Qualification, General Conditions of Contract, Specific Conditions of Contract, Bill of Quantities, Technical Specifications, Tender Drawings of Architectural, Structural, Public Health Engineering, Fire Fighting, HVAC, Electrical, IT Services, Gas Manifold, CSSD, Laundry, Modular Operation Theatres etc.
- Detailed design engineering including but not restricted to architectural and structural
  engineering, electrical engineering, HVAC plants, Laboratory furniture and equipment planning,
  communication and networking planning, fire detection and protection plan, laboratory designs,
  appropriate conduit system for transporting specimen from the wards to concerned
  laboratories, solar water heating, external development, rain water harvesting, external
  services, roads, waste management systems, signage, landscaping, interior design, green
  building concept, furniture & furnishings etc. meeting all laws, regulations and local and global
  standards.

- Getting vetting of drawings from IIT or any other agency approved by the Client at its own cost.
- Obtaining all necessary approvals & permits from the Statutory / local / Government agencies/MCI/fire & forest department/ EIA etc.
- Detailed project planning and scheduling.
- Assisting Client/ HSCC during process of tendering and site visit etc. required for conforming quality & performance of agencies participating in tendering process.

#### **Stage II- Construction and Post Construction Stage**

- Submission of all working drawings of Architectural, Structural (after vetting from IIT), Public Health Engineering, Fire Fighting, HVAC, Electrical, Bio-Safety or other Labs, other services etc.
- Revision of drawings, if required, during execution stage due to site conditions or other unforeseen factors as desired by the HSCC/Client.
- Furnishing replies to all the queries of CVC/CTE/ State Govt. and /or of Government audit relating to the work & ensure compliance of the instructions issued by them.
- Preparing and submission of all as built drawings and obtaining all the required completion certificates/ NOCs from the various local authorities and furnish the building completion/occupancy certificate.
- Provide adequate professional assistance to the Implementing Agency as and when required and to attend the site up to defect liability period.
- Assist in Arbitration/ litigation cases that may arise out of the contracts entered into with the
  contractors and/ or suppliers involving design/work carried out by the Architect and also assist
  replying to the audit paragraphs.

#### Note:

- 1. The selected architectural concept and architectural designs shall become property of the Client including its copyright. Client reserves the right to modify the architectural concept and architectural design for use in any of its projects.
- 2. Requirements and Detailed scope of Services is given in Section VI of this document.
- 3. HSCC/Client shall have the right to request in writing for changes, additions, modifications or deletions in the design and drawings or any part of the work and the Architect shall comply with such request.
  - The Architect shall not make any deviations, alterations, additions or omissions from the work shown/described to the contractor except through and with proper approval of the HSCC/ Client.
- 4. Any terms not laid down, which may arise out of the Agreement, will be dealt with in accordance with Government norms/the conditions of professional rules and practice of Association of Consulting Engineers, India and/or Council of Architecture.

#### 3.3 Deliverables and Timelines

The timelines for the project are as follows:

		Time from the date of Start of Work (Months)
Stage 1	Pre- Construction	3
Stage 2	Construction	15
Stage 3	Post- Construction	2
		20

The Architect shall deliver the following in Pre-construction stage:

SI. No.	Deliverable	Time from the date of Start of Work
1.	Submission of Master Plan, concept plans, preliminary estimates of various buildings & DPR .	One Month
2	Submission of all Architectural & Services planning/ Drawings for approval of local authorities.	2 Months
3	Submission of complete Tender documents, drawings etc.	2.5 Months
4	Obtaining approvals from all local bodies.	3 Months (parallel activity)
5	Submission of all Working Drawings of Architectural, Structural ( after vetting from IIT), Public Health Engineering, Fire Fighting, HVAC, Electrical, Bio Safety Labs etc.	At the end of 3 <sup>rd</sup> Month

The Architect shall supply 05 (Five) sets and 1 (one) soft copy of each of the documents/ drawings to the Client. 04 (four) set of drawings will be supplied in A0 size and 01(One) sets in A3 size .Drawings shall be prepared on AUTO CAD (latest version) and structural design on STAAD PRO (latest version).

#### 3.4 Payment

#### 3.4.1 Fee for Engagement

The Client shall pay to the Architect, a fixed fee of 1.4% of Rs. 139 Cr. including all taxes, levies, cess etc. and will be termed as Architectural fee for providing services as required as per scope of work mentioned in the Tender Document. There shall be no change in the Architectural Fee for the Project on any account for the scope of work as mentioned in the Tender Document. The said fee is inclusive of all the direct and indirect taxes, duties/ cess to be paid by the Architect, proof checking by IIT etc, Architect's fee, any other fee/ expenditure incurred by the Architect. Only the statutory expenses (excepting taxes and levies) made to statutory bodies for the Project shall be reimbursed over and above the Architectural fee. No reimbursement shall be made until the Architect has submitted a written claim for the same to the Client and has attached sufficient documentary evidence. No extra cost shall be admissible for any modification in the design as per site requirement or client requirement. No variation in Architectural fee shall be admissible whatsoever may be the reason. The Bidder shall note that this fee is full and final and no other payment shall be made in this regard.

Unless otherwise explicitly stated in the Contract, the payment shall be as per accepted schedule of payment mentioned in Tender Document. The payment shall be subject to deductions (TDS) as per Indian income tax and other applicable Laws.

#### 3.4.2 Milestones and Payments Terms

Stage		Milestone	% Payment	Cumulative percentage payment
Stage 1		Pre construction Stage		
	On approval of Master Plan, on Submission of concept plans & preliminary estimates of various buildings & their approval by Client.		10%	10%
	ii	On Submission of all Architectural & Services planning/ Drawings for approval of local authorities and obtaining approvals from all local bodies (60% payment on submission and 40% on obtaining approval from local bodies).	15%	25%
On submission of Tender documents including Pre Qualification, General Conditions of Contract, Special Conditions of Contract, Bill of Quantities, Technical Specifications, Tender Drawings of Architectural, Structural, Public Health Engineering, Fire Fighting, HVAC, Electrical, Bio Safety Labs etc. and their approval by the client.		15%	40%	

	iv	On Submission of Working Drawings of Architectural, Structural ( after vetting from IIT), Public Health Engineering, Fire Fighting, HVAC, Electrical, Bio Safety Labs etc.	15%	55%
Stage 2&3		Construction and Post Construction Stage		
	V	Details required during execution of work (On pro-rata basis on amount of work executed.	30%	85%
	vi	On submission of completion (As built) drawings/ certificate duly approved by the competent authority.	10%	95%
	vii	After Completion of Defect Liability period.	5%	100%

#### 3.5 Performance Security & Retention money

- i. Successful Bidder shall furnish to the Client a security in the form of a Bank Guarantee for an amount equal to 5% of the total Architectural Fee towards satisfactory performance of Architect towards the Contract. The Bank Guarantee has to be from a Scheduled Commercial bank based in India and shall be as per Form C provided in the Tender Document. The Performance Security shall be furnished within the time limit specified in Sub-clause 2.7.2.
- ii. Retention money shall be deducted from each Running bill at the rate of 10% of total amount of bill value. 50 % of total retention money shall be released after successful completion of the assignment and the rest amount shall be released after one year of completion of construction work.
- iii. Failure of the successful Bidder to submit the required Performance Security shall constitute sufficient grounds for the annulment of the award of Contract and forfeiture of the Bid Security. The said performance security shall be refunded within 30 days after the successful completion and handover of the project.

#### 3.6 Sub-contracting

The Architect shall not subcontract whole of the work. The Architect shall not subcontract any part of the work without notifying and obtaining prior approval from the Client.

#### 3.7 Proof Checking

The Architect shall get the design proof checked through any IIT or any other agency nominated/ approved by the Client. The Architect shall carry out any correction/ modification as suggested by the said agency. The suggestions of the proof checking agency shall be binding on the Architect. The expenses for the same shall be borne by the Architect within the Architectural Fee.

#### 3.8 Project Management Consultant (PMC)

3.9 The progress of the assignment shall be reviewed by a Project Management Consultant (PMC) i.e. HSCC. The Project Management Consultant (PMC) shall be responsible for day to day monitoring of the Project. The Project Management Consultant (PMC) shall conduct monthly periodic reviews for the performance of the Architect and report the same to the Client. The Architect shall comply with the instructions of the PMC Consultant and the same shall be binding on him.

The PMC/ Client have the right to inspect the accounts and records and get the same audited by the auditors appointed by the Client. The Architect shall provide all assistance to the Client/ PMC and any authorized representative of the Client/ PMC in this regard.

#### 3.10 Site team during the construction phase

The Architect shall maintain a "Site Team" consisting of adequate key (at least One Architect & One Engineer) personnel during the construction phase and render advice to the Client/ Consultant and the Implementing Agency as and when called upon. PMC may ask Consultant at any time during the implementation of project to increase members of "Site Team". The detailed scope of services under this phase is given separately in Section VI.

The visit schedule of the Consultant's team at site shall be decided by the PMC/ Client. The members will need to visit as per the above schedule and/ or as and when needed by the Client. The Architect shall ensure that the above members are available whenever called upon by the Client/ Consultant within 7 days of such request. The HSCC/Client shall send such written request to the Project Manager of the Architect Team. The Project Manager should ensure that the required personnel are present at the required time.

A failure to make available the Site Team shall constitute default on part of the Architect and in such cases, the Client may levy a fine of Rs 10,000 (Rupees Ten thousand) per person per day for each such default. The decision of the Client in definition of default and levy of fine shall be final and binding on the Architect.

#### 3.11 Available Information

The following reports form part of the Tender Document and shall be supplied to the Architect for assistance in preparation of his Bid.

i. Site plan.

Any other information available with the Client, which can help the Architect during the Project, shall be shared by the Client with the Architect at their discretion and at the request of the Architect.

#### 3.12 Quality Assurance

The Architect shall ensure quality in his work. The documents and design/ drawings prepared by the Architect shall correspond to the international best practices and as a minimum conform to ISO 9001: 2000- "Quality Management System- Requirements".

3.13 Architect shall be responsible for satisfying the chief vigilance commission (Chief Technical Examination Wing)/ Govt. authorities as and when the works are technically examined by them. Architect /contractor shall furnish the replies to all the queries of CVC/CTE &/or of Govt. audit relating to the said work & shall ensure compliance of the instructions issued by them.

#### 3.14 Disputes and Arbitration

All disputes arising during the progress of the Project shall be settled through the procedure mentioned in the General Conditions of Contract.

# (Section IV)

### **Evaluation Process and Criteria**

## SECTION- IV EVALUATION PROCESS AND CRITERIA

#### 4.1 Evaluation Process

- 4.1.1 The Technical Proposal of the Bidders shall be evaluated as per clause 4.2:
- 4.1.2 The Bidders may be invited to make a presentation to the Evaluation Committee on:
  - i. How does the design methodology conform to the Client Requirements?
  - ii. Unique features of the design methodology
  - iii. What are the Green Building features incorporated?
  - iv. Any other information which would assist in improving the evaluation score.
  - v. Bidders may present alternative scheme with cost comparison.
- 4.1.3 The Technical Proposal shall be evaluated by the Evaluation Committee for the above parameters based on the evaluation criteria mentioned below in Clause 4.2 and given a technical score
- 4.1.4 Bidders securing minimum 70% of the marks mentioned below shall be declared technically successful
- 4.1.5 The HSCC/ Client shall notify the bidders that have secured the minimum qualifying mark.

#### 4.2 Technical Evaluation Criteria (Out of 100)

SI. No	Criteria	Maximum Marks
1	Suitability of Design of Master plan	30
(a)	Design Concept/Philosophy	8
(b)	Approach & Methodology	5
(c)	Layout planning/Master plan	7
(d)	Space Planning	8
i.	Space Utilization	
ii.	Circulation and flow	
iii.	Activity Sequencing	
iv.	Parking	
v.	Expansion Plans	
vi.	Specifications and Standards adopted in the design	
vii.	Adoption of Best Practices	
viii.	Signage	
ix	Green Building features	
(e)	Landscaping	2
2.	Suitability of Design of Buildings	35
(a)	Design Concept/Philosophy	10
(b)	Approach & Methodology	5
(c)	Meeting client requirements	5

(d)	Space Planning	15
i.	Space Utilization	
ii.	Circulation and flow	
iii.	Activity Sequencing	
iv.	Specifications and Standards adopted in the design especially with reference to the materials, energy efficient concept etc.	
v.	Design of Bio safety labs as per various Bio safety norms	
vi.	Furniture Planning, Signage etc	
vii.	Model	
3.	**Qualifications and competence of the key staff for the	20
	Assignment	
a)	Team Leader	4
b)	Architects	3
c)	Hospital Planners	2
d)	Landscaping experts	1
e)	Biomedical Engineer, Product Designer, Scientists etc.	2
f).	Services E ngineers (PHE, Fire Fighting, HVAC, Electrical etc.)	8
4.	Cost & Energy Efficiency (The design should be cost effective and should also meet minimum GRIHA 3 star rating for Energy efficiency). The Architect may enclose a write-up on how their design is cost and energy efficient)	5
5.	Presentation	10
	TOTAL	100

#### 4.3 Technical Evaluation Criteria (Out of 100)

SI. No	Criteria	Maximum Marks
1	Suitability of Design of Master plan	30
2	Suitability of Design of Buildings	35
3	**Qualifications and competence of the key staff for the	20
	Assignment including Project Manager	
4	Cost & Energy Efficiency	05
5	Presentation	10
	TOTAL	100

<sup>\*\*</sup>The minimum required qualifications and experience of Professional staff:

(CV recently signed and dated by the professional staff to be enclosed)

SI. No	Designation	Min. no of personnel	Qualification	Experience
1	Project Head/ Team Leader	1	Graduate in Architecture (Degree recognized by Council of Architecture)	Minimum 5 years as Team leader and minimum total experience of 15 years.
2	Sr. Architect	2	Graduate in Architecture (Degree recognized by Council of Architecture)	Minimum experience of 10 years in architecture
3	Architects & Hospital Planner	(2+1)= 3	Graduate in Architecture (Degree recognized by Council of Architecture)	Minimum 5 years experience
4	Landscape Architect	1	Post Graduate in engineering	Minimum 5 years experience in landscaping
5	Structural Engineer	3	Post Graduate in Structural Engineering	Minimum 5 years experience in structural designing and total of 10 years
6	Utility Engineers		Graduate in relevant branch of engineering	Minimum relevant experience of 5 years
Α	Civil	2	-do-	
В	PHE experts	1	-do-	
С	Electrical Engineer	2	-do-	
D	HVAC/ Mechanical engineer	2	-do-	
7	IT/Hardware Engineer(s)	1	Post graduate / graduate in IT/ hardware	Minimum relevant experience of 5 years
8	Biomedical Engineer, Fire fighting experts, environmental experts, landscaping experts	1 each	Graduate/ Post Graduate in concerned discipline	Minimum relevant experience of 5 years

Note: Team leaders and the key staff proposed to be deployed shall be regular employees of the respective firms.

#### 4.4 Notification

The Successful Bidder would be notified in writing by HSCC/Client by issuing the Letter of Award (LOA) in favour of the Bidder. HSCC/Client shall endeavour to issue the LOA to the selected Bidder by the date mentioned against issue of LOA in the Schedule of the Tender Document.

#### Annexure -1

#### CHECK LIST OF DOCUMENTS TO BE SUBMITTED WITH THE BID

SI.	Document	No. of sets to	Page
No.		Be submitted	no.
rechnic	AL PROPOSAL	l	
1.0	Form of Bid- (Form A)	(Original)	
2.0	Tender Processing Fee in the form of demand draft	(Original)	
3.0	Bid Security (Form B) in separate sealed envelope	(Original & Copy)	
4.0	Power of attorney for person signing the Bid (Form D)	(Original & Copy)	
5.0	Initialled Bid Documents	(Original)	
6.0	Technical Proposal	(Original & Copy)	

### FORM OF BID

To,

The Chief General Manager HSCC (I) Ltd., E-6(A), Sector-1

#### Noida-201301, Uttar Pradesh

- 1. Having visited the Site, ascertained the Site conditions and examined the Conditions of Contract, detail scope of work, Terms of Reference, Notice Inviting Bids, Instructions to Bidders and addenda for the execution of the said work, we the undersigned, offer to execute and complete such works and remedy defects therein in conformity with the said Conditions of Contract, detail scope of work, Terms of Reference, Notice Inviting Bids, Instruction to Bidders and addenda for "Appointment of Design Consultant for Comprehensive Master Planning & Construction of Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali for Medical Education Department, Govt. of Rajasthan".
- 2. While preparing this Bid, we have gathered our own information and conducted our own inquiry/survey to our satisfaction and we do not rely solely on the information provided in this Tender Document. We shall not hold HSCC/Client responsible on any account in this regard.
- 3. We acknowledge that the Appendix form an integral part of the Bid.
- 4. We undertake, if our Bid is accepted, to commence the services within the stipulated time and to complete the whole of the services comprised in the Contract within the stipulated time calculated from the date of issue of the Letter of Award, as indicated in the Appendix.
- 5. If our Bid is accepted, we will furnish a bank guarantee, within 2 weeks of issue of Letter of Award as Performance security for the due performance of the Contract.
- 6. We agree to abide by this Tender Document for a minimum period of 180 days from the last date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extended period mutually agreed to.
- 7. We agree that on submission of this bid, all the copyrights, intellectual property rights and the ownership of the design and drawings shall rest with HSCC and HSCC shall have the right to modify the same. We agree to abide by the modifications proposed by HSCC as per the terms and conditions of the Contract.
- 8. We agree that our design may be used by the Client at any other site without any obligation to us. 9. We hereby certify that
- i) We have not made any misleading or false representation in this Tender Document.
- ii) We have not been blacklisted by any Govt. agency after submission of Bid.
- We declare that submission of this Bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services, or any other item of work related to the award and performance of this Contract. We further confirm and declare that no agency, commission or any payment, which may be construed as an agency, commission has been, or will be, paid and that the Bid price does not include any such amount. We acknowledge the right of HSCC/Client, if it finds to the contrary, to declare our Bid to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
  - iv) We understand that you are not bound to accept the lowest or any Bid you may receive.
  - v) If our Bid is accepted we understand that we are to be held solely responsible for the due

performance of the Contract. vi) The timelines and deliverables as given in the TENDER DOCUMENT document are acceptable to us and we undertake to complete the work within the scheduled timeline for the project. We enclose; vii) All documents as per the checklist a. Bank guarantee for Rs \_\_\_\_\_ (Rupees \_\_\_\_ only) issued by \_\_\_\_ (name of the bank) valid until \_\_\_\_\_ towards Bid Security Demand draft no \_\_\_\_\_ dated \_\_\_\_ issued by \_\_\_\_ (name of the bank) for Rs 10,000 (Rupees Ten thousand Only) drawn in favor of M/s HSCC (I) Limited, payable at NOIDA/New Delhi Note: (i). The Appendix forms part of the Bid (ii) Bidders are required to fill up all the blank spaces in this form of Bid and Appendix. Dated this.....day of......2015 Signature ..... Name..... in the capacity of ..... duly authorized to sign Bids for and on behalf of...... Address .....

Witness - Signature .....

Address .....

Occupation .....

Name .....

#### Form A

#### APPENDIX TO THE FORM OF BID

i.	Amount of bank guarantee as Performance Security	5 percent of the Total Contract Price.
li	Commencement of work	15 days from the date of issue of LOA.
iii	Time for completion from the date of signing of Contract Agreement.	Stage I 3 months Stage II- 15 months Stage III- 2 months
iv.	Period of validity of Performance Security from the date of completion and hand over the project.	6 months

	Signature (Authorized Signatory)
	Name
Date	Address
Place	

## Form B- Format for Bid Security Form B

Page 1 of 2

#### FORM FOR BID SECURITY BANK GUARANTEE

KNOW BY ALL MEN by these presents that we				
100 Stu	t ident	(Name of Bidder) (hereinafter called "the Bidder") has submitted its Bid dated for Design Consultant for Comprehensive Master Planning & Construction of Construction of Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other istrict Pali for Medical Education Department, Govt. of Rajasthan.		
AND W		AS the Bidder is required to furnish a bank guarantee for the sum of Rs (Rupees only) as Bid Security against the Bidder's offer as aforesaid.		
		[AS(Name of Bank) have, at the request of the Bidder, agreed to give this shereinafter contained.		
1.	We	further agree as follows:		
	a.	That HSCC may without affecting this guarantee grant time or other indulgence to or negotiate further with the Bidder in regard to the conditions contained in the said Bid and thereby modify these conditions or add thereto any further conditions as may be mutually agreed upon between HSCC and the Bidder.		
	b.	That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our bank or in the constitution of the Bidder.		
	c.	That any account settled between HSCC and the Bidder shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.		
	d.	That this guarantee commences from the date hereof and shall remain in force till (date to be filled up) (up to 210 days from the last date of submission of Bid).		
	e.	That the expression 'the Bidder' and 'the Bank' herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assigns.		
2.	The	conditions of this obligation are:		
	a.	if the Bidder withdraws his Bid during the period of Bid Validity, or		

- b. if the Bidder does not accept the correction of his Bid Price as corrected by the Evaluation Committee
- c. if the Bidder having been notified of the acceptance of his Bid by HSCC during the period of Bid Validity:
  - (i) fails or refuses to furnish the required Performance Security for the amount equal to 5% of the Contract price
  - (ii) fails or refuses to enter into a Contract within 3 weeks of notification of the acceptance of his bid by HSCC.

We undertake to pay to HSCC up to the above amount upon receipt of his first written demand, without HSCC having to substantiate his demand provided that in his demand HSCC will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions (a), (b), (c) mentioned above, specifying the occurred condition or conditions.

Signature of the witness Name of the	Witness Address of
the Witness	
Signature of Authorized official of the Bank	
	Name of official
	Designation
	Stamp/Seal of the Bank

#### Form-C-Format for Performance Security

Page 1 of 2

#### FORM OF PERFORMANCE SECURITY BANK GUARANTEE

This deed of guarantee made this day of \_\_\_\_\_\_ between Bank of \_\_\_\_\_(hereinafter

called the "Bank") of the one part, and Medical Education Department, Govt. of Rajasthan (hereinafter called "The Client") of the other part.			
Plann of Exi	eas The Client has awarded the Contract for "Design Consultancy for Comprehensive Master ing & Construction of Construction of 100 Student Intake Medical College including up-gradation sting Hospital as per MCI Guidelines with other facilities at District Pali for Medical Education thment, Govt. of Rajasthan to (hereinafter called the Architect).		
(Nam	e of the Architect)		
a tota	WHEREAS the Architect is bound by the said Contract to submit to Client, a Performance Security for I amount of Rs		
	authorized to sign and to incur obligations for and on behalf of and in the name of(Full name of Bank), hereby declare that the said Bank will		
	guarantee The Client the full amount of Rs as stated above.		
2.	On or before, the Architect has signed the aforementioned Contract with the Client, the Bank is engaged to pay the Client, any amount up to and inclusive of the aforementioned full amount upon written order from the Client to indemnify the Client for any liability of damage resulting from any defects or shortcomings of the Architect or the debts he may have incurred to any parties involved in the works under the Contract mentioned above, whether these defects or shortcomings or debts are actual or estimated or expected. The Bank will deliver the money		

3. This guarantee is valid for a period till six months beyond the successful completion & handling over of the above project or the extended period, thereof

guarantee shall be absolute and unequivocal.

required by the Client immediately on demand without delay without reference to the Architect and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank the liability or damages resulting from any defects or shortcomings or debts of the Architect. The Bank shall pay to the Client any money so demanded notwithstanding any dispute/disputes raised by the Architect in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this

4. At any time during the period in which this guarantee is still valid, if Client agrees to grant a time extension to the Architect or if the Architect fails to complete the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under Para 5, above, it is understood that the Bank will extend this Guarantee under the same conditions for the required time on demand by the Client and at the cost of the Architect.

- 5. The guarantee hereinbefore contained shall not be affected by any change in the Constitution of the Bank or of the Architect.
- 6. The neglect or forbearance of the Client in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Client for the payment hereof shall in no way relieve the bank of their liability under this deed.
- 7. The expressions "the Client", "the Bank" and "the Architect" hereinbefore used shall include their respective successors and assigns.

	In witness whereof I/We of the bank have signed and sealed this guarantee on the day of (Month) <b>2015</b> being herewith duly authorized		
	For and on behalf of		
TheBank.			
Signature of authorized bank official			
	Name: Designation:		
	Stamp/Seal of the Bank:		

of:	sealed and delivered for and on behalf of the Bank by the above named	in the presence
	Witness 1	
	Signature	
	Name	
	Address	
	Witness 2	
	Signature	
	Name	
	Address	

#### Form D- Format for Power of Attorney for authorized signatory

Page 1 of 1

#### FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF PROPOSAL

	(Name of the Bidder and address of e, appoint and authorize Mr/ Ms(name and
residential address of Power of Attorney	holder) who is presently employed with us and holding the
•	our attorney, to do in our name and on our behalf, all such
	nection with or incidental to our bid for providing Design
•	anning & Construction of Construction of 100 Student Intake
5 5 1 5	Existing Hospital as per MCI Guidelines with other facilities at
	nent, Govt. of Rajasthan including signing and submission of all
,	sponses to HSCC/Client, representing us in all matters before
said Project.	CC/Client in all matters in connection with our proposal for the
	and things lawfully done by our said attorney pursuant to this is and things done by our aforesaid attorney shall and shall
Dated this theDay of	
2015	
(Executants) Note:	

- ◆ The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- This Power of Attorney should be provided on stamp paper of appropriate value.

#### Form E- Format for Contract Agreement

Page 1 of 2

#### FORM OF CONTRACT AGREEMENT

<b>b</b> etwee	greement is made at NOIDA, Uttar Pradesh on the day of <b>2015</b> on Medical Education Department, Govt. of Rajasthan(herein after called "The Employer") of the lart and (Name of the Architect) (Address of the Architect)
	of hereinafter called chitect" of the other part.
should Constru Hospita Depart as wel	as The Employer, is desirous that (*** certain Services should be provided and) certain works be executed for Providing Design Consultancy for Comprehensive Master Planning 8 uction of Construction of 100 Student Intake Medical College including up-gradation of Existing al as per MCI Guidelines with other facilities at District Pali for Medical Education ment, Govt. of Rajasthan and has accepted a Bid by the Architect for providing such services (*** I as guarantee of such services) and the remedying of defects therein. now this agreement sed as follows:
1.	In this agreement words and expression 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 agreement, viz:  a. Tender Document     Notice Inviting Bid     Instructions to Bidders (Including     Annexure) Terms of Reference     Evaluation process & criteria     General Conditions of Contract     (GCC) Requirements & Scope of     Services Site Plan  b. Bid submitted by the Architect. c. Schedule of milestones d. Form of Bid with Appendix e. Letter of Award (LOA) f. Addendums/corrigendum issued, if any
2.	In consideration of the payments to be made by The Employer to the Architect as hereinafte mentioned, the Architect hereby covenants with The Employer to execute and complete the Project by and remedy any defects therein in conformity in all respects with the provisions of the Contract.
3.	The Employer hereby covenants to pay the Architect in consideration of the execution and completion of the Project and the remedying of defects therein, the total Contract Price subject to such additions thereto or deductions there from as may be made under the provisions of the Contract at the times and in the manner prescribed by the Contract.
1	Obligation of the Architect

The Architect shall ensure full compliance with tax laws of India with regard to this Contract and shall be solely responsible for the same. The Architect shall keep the Client fully indemnified against liability of tax,

interest, penalty etc. of the Architect in respect thereof, which may arise.

IN WITNESS WHEREOF the parties hereto have caused their respective common seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

For and on behalf of the Architect

Signature of the authorized official

Name of the official

Stamp/Seal of the Architect

Sor and on behalf of The Employer

Signature of the authorized

official Name of the official

Stamp/Seal

#### SIGNED, SEALED AND DELIVERED

By the said	By the said Name
Name	
	on behalf of The Employer in the presence
on behalf of the Architect in the presence of:	of:
Witness	Witness
Name	Name
Address	Address

#### Note:

To be made out by Client at the time of finalization of the Form of Agreement.

\*\* Blanks to be filled by Client at the time of finalization of the Form of Agreement.

\*\*\* To be deleted if not applicable

### (Section V)

**General Conditions of Contract (GCC)** 

#### 1.0 Definitions

The Following documents shall be part of contract agreement:

- a) Tender Document
- b) Letter of Award

All terms & conditions mentioned in the above document shall be fully adhered.

#### 2.0 Interpretation

The titles and headings of the sections in this Agreement are inserted for convenient reference only and shall not be construed and limiting or extending the meaning of any provisions of this Agreement.

#### 3.0 Services to be performed

Architect shall perform the Services as per the 'Scope of work' or elsewhere mentioned in the Tender Document as per the terms and conditions and within time frame specified in the Agreement.

#### 4.0 Drawings and Documents

All copyright and other proprietary rights in the Works shall vest and stand assigned to the Client. The Client shall consequently own, absolutely and exclusively on a worldwide basis, the whole of property, rights, title and interest including all copyright in the Works, present or future, vested or contingent, generally and without limitation, for the whole term of the copyright, including the right to modify and/or make any alterations to the Works and all the above rights shall not lapse even if such rights are not exercised by Client during the terms of the copyright and the Architect shall be required/obliged to execute any deeds/documents, as may be required or considered necessary, by Client to give effect to and secure the abovementioned rights of Client in the Works. For the purpose of this clause, the term "works" shall include all "works" covered by the copyright 1957 including the design, drawings or documents prepared by the Architect at the inception of, during the course of and until the completion of the Project and also includes any work created directly or indirectly in the performance of the obligations of the Architect in connection with the Project.

The Architect shall not use or allow anyone to use these drawings, designs, documents and software without the prior written permission of the HSCC/Client and any such act without the permission of the HSCC/ Client shall constitute violation of Intellectual Property Rights.

Even in the event of stoppage / cancellation of the selection process, all documents /designs/ drawings submitted by the Bidders to the HSCC/Client on or before the cancellation of the selection process shall become the property of the HSCC/Client and the Bidders shall have no claim on such documents/design.

#### 5.0 Guarantees and Liabilities

#### 5.1 General

Architect guarantees that the Services as specified/described under the scope of work or elsewhere in this Agreement, and technical documents to be developed by Architect shall be in accordance with sound and established engineering practices, using Indian Codes and Regulations and wherever applicable, International Standards, for the purpose(s) specified, free from defects and suitable for respective uses intended.

#### 5.2 Liability of the Architect

The Architect shall be liable to Client/HSCC for the performance of services in accordance with the provision of this Agreement and for loss suffered by Client/HSCC as a result of default of the Architect in such performance.

#### 6.0 Architect Fees

The said fee is inclusive of all the direct and indirect taxes, duties/ cess to be paid by the Architect, proof checking by IIT etc, any other fee/ expenditure incurred by the Architect. Only the statutory expenses made to statutory bodies for the Project shall be reimbursed over and above the Fees. No extra cost shall be admissible for any modification in design as per site requirement. No reimbursement shall be made until the Architect has submitted a written claim for the same and has attached sufficient documentary evidence. The Architect Fees payable to the Consultant is fixed and is not subject to change under any circumstance.

The payment shall be as per schedule of milestones specified in the Terms of Reference and shall be released on achievement of each milestone individually. The amount shall be payable in Indian Rupees only.

The HSCC in consultation with the Client shall certify completion of each milestone to the satisfaction of the Client. Architect shall submit his bill only after such certification by the HSCC.

The Architect shall submit his bill for payment to Client within 7 days of such bill becoming due. The payment will be released by Client within 42 days of such submission. If any error/discrepancy is discovered in the bill submitted by the Architect, the same shall be reported to the Architect within 14 days of such discovery. In such cases, the Architect shall resubmit his bill within 7 days.

#### 7.0 Liquidated damages

In case the Architect is unable to adhere to the project timelines, the Architect will be charged liquidated damages at the rate of half percent of the Architect Fees for the Works for each week; the Architect is in default subject to a maximum of 10% of the total Contract Value. In case of the Architect failing to pay the damage charges, the same may be deducted by the Client/ HSCC from the performance security, retention money and any money due for payment to the Architect.

#### 8.0 Insurance

#### 8.1 Insurance by Architect

During the performance of Services hereunder, Architect, at his own cost, shall take out, carry and maintain insurance as applicable from those listed below:

- 8.1.1 Workman's compensation insurance, covering all employees of Architect for statutory benefits as set out and required by local law in the area of operation or area in which Architect may become legally obliged to pay benefits for bodily injury or death.
- 8.1.2 Any other insurance cover which may be required to be taken under the law or on any other account.

#### 9.0 Indemnity

- 9.1 Architect shall hold harmless and indemnify the HSCC/Client and its agents, against any claims or liability because of personal injury including death of any employee of Architect and arising out of or in consequence of the performance of this Agreement.
- 9.2 HSCC/Client shall not be responsible for any loss or damage to property of any kind belonging to Architect or its employees, servants or agents.
- 9.3 Architect shall hold harmless and indemnify HSCC/Client against any claim or liability arising in respect of:
  - a) Injury to or death of Architect's employees, agents and Project Implementation Agency or any other persons howsoever caused; and
  - b) Loss of or damage to the property of Client, Client's employees, agents and Project Implementation Agency or any other person except those belonging to Architect or its employees.
- 9.4 The Architect shall take out and maintain adequate Professional Liability Insurance to cover, Medical Education Department, Govt. of Rajasthan and its officials, HSCC (India) Ltd. and its officials for any claim arising due to defect in design, services/equipment during the construction, erection, commissioning of the Project and including defects liability period after completion and handing over of the Project.
- 9.5 The Architect shall take out and maintain adequate insurance to cover its employees / contract workers etc. under Workman Compensation Act.
- 9.6 The HSCC/Client undertakes no responsibility in respect of any life, health, accident, travel and other insurance which may be necessary or desirable for the personnel of Project Architect, Contractors, Sub-contractors, vendors and specialist/Contract employees associated with them for the Project.

#### 10.0 Indemnity for Claim against Patents

Architect shall indemnify and hold HSCC/Client harmless from all costs, damages, and expenses arising out of any claim, action or suit brought against HSCC/Client by third parties in respect of any infringement of any patent or registered design or any similar rights resulting from the use of any technical information, data or process or design belonging to Architect and furnished to HSCC/Client.

#### 11.0 Secrecy

Architect shall not disclose to any third party, any information, data, design, drawings, plans, specifications, etc. at any time either in whole or in part, shall use all reasonable efforts to preserve the secrecy of the above information and shall not use the same for any other purpose

#### 12.0 Force Majeure

12.1 For the purposes of this Agreement, "Force Majeure" means War, invasion, revolution, riots, sabotage, lockouts, strikes, work shut-down imposed by Government Acts or legislature or other authorities, stoppage in supply of materials, fuel or electricity, breakdowns of machinery, act of God, epidemics, fires, earthquakes, floods, explosions, accidents, sea navigation blockades or any other

- acts or events whatsoever which are beyond reasonable control and which shall directly or indirectly prevent completion of the project within the time specified in the agreement, will be considered Force Majeure.
- 12.2 Any delay in or failure of performance by a Party shall not constitute default hereunder or give rise to any claims for damages against said Party if and to the extent caused by reasons arising out of Force Majeure.
- 12.3 The Architects shall be granted necessary extension of time to cover the delay as caused by Force Majeure without any financial repercussions.
- Both Parties shall keep a record of the circumstances referred to above which are responsible for causing delays in the execution of the project.
- 12.5 Should one or both parties be prevented from fulfillment of the contractual obligations by a state of Force Majeure, the two parties shall consult each other and decide regarding the future execution of the contract

#### 13.0 Statutory Requirements

During the tenure of this Agreement nothing shall be done by the Architect in contravention of any law, Act and/or Rules/Regulations, there under or any amendment thereof governing inter alia customs, taxes, foreign exchange etc.

#### 14.0 Changes and Additions in Architect's Scope of Work

HSCC/Client shall have the right to request Architect in writing to make any changes, modifications, and/or additions to Architect's scope of Services. Architect shall on such written requests carry out the consequential work on account of such changes/modifications or addendums etc. without any additional payment from the / client.

#### 15.0 Contract Period

On signing of agreement, this Agreement shall be deemed to have come into force from the date of Commencement of works as mentioned in Request for Proposal and shall remain in force, upto the end of the defect liability period including the settlement of final accounts and shall be as follows:

Stage I (Pre- Construction stage) - 3 months
 Stage II (Construction stage) -15 months
 Stage III (Post Construction) - 2 months

#### 16.0 Conflict of Interest

- 16.1 The Client requires that Architect provides professional, objective and impartial advice and at all times hold the Client's interests paramount, strictly avoid conflicts with other Assignment/jobs or their own corporate interests and act without any consideration for future work.
- 16.2 Without limitation on the generality of the foregoing, Architect, and any of his affiliates, shall be considered to have a conflict of interest and shall not be hired, under any of the circumstances set forth below:
  - (i) Conflicting activities; A firm that has been engaged by the Client to provide goods, works or Assignment/job other than consulting assignment/job for a project, and any of its affiliates, shall be disqualified from providing consulting assignment/job related to those goods, works or assignment/job. Conversely, a firm hired to provide consulting assignment/job for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or assignment/job other than consulting assignment/job resulting from or directly related to the firm's consulting assignment/job. Other than consulting assignment/job are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.
  - (ii) Conflicting assignment/job; An Architect (including its Personnel and Sub-Architects) or any of its affiliates shall not be hired for any Assignment / job that, by its nature, may be in conflict with another Assignment/job of the Architect to be executed for the same or for another Client. For example, an Architect hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and an Architect assisting a client in the privatization of public assets shall not purchase, nor advise purchasers of, such assets. Similarly, an Architect hired to prepare Terms of Reference for an Assignment/Job should not be hired for the assignment/job in question.
  - (iii) Conflicting relationships; An Architect (including its Personnel and Sub-Architects) thathas a business or family relationship with a member of the staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment/job, (ii) the selection process for such assignment./job, or (iii) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the throughout the selection process and the execution of the Contract.

#### 17.0 Publication

Unless otherwise specified in the Agreement, Architect either alone or jointly with others can publish material relating to the Services. Publication shall be subject to approval of the Client if it is within 2 years of completion of the services.

#### 18.0 Suspension & Termination

#### 18.1 Suspension

Client shall have right to suspend partly or as a whole at any time the performance of Services, in such event, Client shall pay to Architect any such amount that may be determined by The Client and such determination shall be final and binding on the Architect.

#### 18.2 Termination

#### 18.2.1 Termination on account of Force Majeure

If as a result of Force Majeure, the Architect is unable to perform Service for a period of more than 60 days, the Client shall have the right to terminate this Agreement on account of Force Majeure, as set forth in clause 12.0

#### 18.2.2 Termination on account of insolvency

In the event the Architect at any time during the term of this Agreement becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Client shall, by a notice in Writing have the right to terminate this Agreement and all the Architect's rights and privileges hereunder, shall stand terminated forthwith.

#### 18.2.3 Termination for unsatisfactory performance

If the Client considers that the performance of the Architect is unsatisfactory or, not up to the expected standard, the HSCC/Client shall notify the Architect in writing and specify in detail the cause of such dissatisfaction. The Client shall have the option to terminate this Agreement by giving 30 days notice in writing to the Architect, if Architect fails to comply with the requisitions contained in the said written notice issued by the HSCC/Client.

#### 18.2.4 Time is the essence of the Contract

Architect shall be required for the commencement of Services immediately after effective date of Agreement. If the Architect fails to mobilize as above, the Agreement shall automatically stand terminated unless Client has extended the period for commencement of Services in writing.

#### 18.2.5 Consequences of termination

In all cases of termination herein set forth, the obligation of the client to pay for Architect's performance shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Agreement that reasonably require some action or forbearance after such termination.

18.2.6 In the event of the Termination of the Agreement, the Project Architect shall be obliged to withdraw from the site(s) along with his personnel, equipment etc. within 15 days of such termination; failing which losses or damages which may be suffered by the Client on account of non-withdrawal from the site(s), shall be to the account of the Architect.

#### 19.0 Assignability

The Contract and benefits and obligations thereof shall be strictly personal to the Parties and shall not on any account be assignable or transferable by the Parties under any circumstances.

#### 20.0 Arbitration

20.1 If, at any time, any difference or dispute arises between the Parties regarding interpretation, execution or implementation of the Agreement, Parties shall try to settle the same amicably through mutual discussions. Differences and/or disputes remaining unresolved shall be referred to the sole

Arbitration of the Medical Education Department, Govt. of Rajasthan or his sole nominee. The award shall be binding on the Parties

The arbitration proceedings shall be held at NOIDA, Uttar Pradesh only and enforceable at the courts of jurisdiction at NOIDA, Uttar Pradesh only.

20.2 The Services under this Agreement shall be continued during the arbitration proceedings, unless otherwise agreed in writing by Parties or unless it is proved that the Services cannot possibly be continued during the arbitration proceedings.

#### 21.0 Jurisdiction & Applicable Law

Notwithstanding any other Court or Courts having jurisdiction to decide the question(s) forming the subject matter of the reference, any/all actions and proceeding arising out of or relative to the Agreement (including any arbitration in terms thereof) shall lie only in the Court of Competent Civil Jurisdiction in this behalf at NOIDA, Uttar Pradesh and only the said Court(s) shall have jurisdiction to entertain and try any such action(s) and/or proceeding(s) to the exclusion of all other Courts.

This Agreement shall be governed by the laws of India for the time being in force.

#### 22.0 Notices

- (a) Subject to any provisions in the Contract Documents to the contrary, any notice, or communication sought to be served by the Architect on the Client with reference to the Agreement shall be deemed to have been sufficiently served upon the Client (notwithstanding any enabling provisions under any law to the contrary) only if delivered by hand or by Registered Post to the Authorized Representative of Client as defined in the Conditions of Agreement.
- (b) Without prejudice to any other mode of service provided for in the Contract Documents or otherwise available to the Client, any notice, order or other communication sought to be served by the Client on the Architect with reference to the Agreement, shall be deemed to have been sufficiently served if delivered by hand or through Registered Post to the Authorized Representative of Architect as defined in the Conditions of Agreement.
- (c) Date of notice of instruction shall be the day on which said notice or instruction is received.
- (d) Any Party may change its notice address at any time by so advising the other Party thereof in writing.

#### 23.0 Independent Audit

The Architect shall maintain up-to-date records that clearly identify relevant time and expenses and be responsible and liable for all statutory audits at no extra costs as required under the law.

#### 24.0 Languages and law

This Agreement and the Services performed herein-under shall be in English language. This Agreement shall be subject to Indian Laws as in force from time to time.

#### 25.0 Assignment and Sub-Contracts

- 25.1 The Architect shall not without the written consent of the Client assign the benefits from the Agreement other than money.
- 25.2 The Architect shall not without the written consent of the Client initiate or terminate any subcontract for performance of all or part of the Services.

#### 26.0 Standards of ethics

The Client desires that the Architects should observe the highest standard of ethics during the execution of such contracts.

(a) In pursuance of the above objective, this policy defines, the terms set forth below as follows:

"corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the selection process or in contract execution; and

"fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract,

"collusive practice" means a scheme or arrangement between two or more Architects, with or without the knowledge of the Client, designed to establish prices at artificial noncompetitive levels.

"coercive practice' means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.

- (b) It is further provided that:-
  - (i) The Client will annul/terminate the Contract if it determines that the Architect recommended for award has engaged in corrupt or fraudulent activities in competing for the Contract in question;
  - (ii) The Client will declare a Architect ineligible, either indefinitely or for a stated period of time, to be awarded a Government contract if it at any time determines that the Architect has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract

#### 27.0 Architect's action requiring Client's prior approval.

Architect shall obtain the Client's prior approval before taking any action relevant to the Project.

#### **28.0** Architects' Personnel (Listing as per 4.3 in Section IV)

#### 28.1 Description of Personnel

The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Architect's Personnel shall be as per the agreement.

#### 28.2 Removal and/or Replacement of Personnel

- a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Architect, it becomes necessary to replace any of the Key Personnel, the Architect shall provide as a replacement a person of equivalent or better qualifications.
- b) If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Project Architect shall, at the Client's written request specifying the grounds therefore, provide as a replacement a person with qualifications and experience acceptable to the Client.
- c) The Architect shall have no claim for additional costs arising out of or incidental to any removal and/ or replacement of Personnel.

## (Section-VI)

**Requirements and Scope of Services** 

#### 1.0 Requirements

#### **Introduction to the Project**

Medical Education Department, Govt. of Rajasthan in order to further strengthen Health care delivery in the state have planned to open 6 new medical colleges under centrally sponsored scheme. The project requirement Construction of 100 Student Intake Medical College including up-gradation of Existing Hospital as per MCI Guidelines with other facilities at District Pali Medical Education Department, Govt. of Rajasthan"

Vision of the proposed Medical Education and Healthcare Delivery is to provide a modern integrated approach to medical education and service to not only produce the type of doctors needed for India's future but also develop a model healthcare delivery system suitable for the country's requirement, especially in rural areas.

#### The Site

The project site is situated in district Pali, Rajasthan.

#### **Hospital Space programming**

The existing District Hospital is required to be up-graded under the scheme to meet all the requirements of MCI Guidelines for annual 100 Student intake Medical College. The planning of the medical college and hospital to take in to consideration futuristic requirements of such institute by providing optimized design and space planning.

#### **SERVICES**

#### **Central Sterilization Services:**

There shall be an independent Central Sterilization unit capable of taking the total working load of operation theatres, laboratories close to or in the operation theatre block itself. It shall have adequate equipment like bulk sterilize with separate ends for loading unsettle material, unloading sterile, cold sterilize, Ethylene oxide sterilize, Freon ethylene instruments and mattress sterilize, sterile racks, mixers, and trays for instruments. This department shall work round the clock and all materials, instruments, trays, and dressing material etc. shall be supplied round the clock.

#### Laundry:

The Central Mechanical laundry shall be provided with bulk washing machine, Hydro-Extractor, flat rolling machine. Laundering of hospital linen shall satisfy two basic considerations, namely, cleanliness and disinfection. The hospital could be provided with necessary facilities for drying, pressing and storage of soiled and cleaned linens

Store: There shall be a central hospital stores for stocking & supply of drugs, equipments.

#### Kitchen and Store:

Loading and Unloading & receiving, Equipment Store, Raw material store, Cold store, Utensil Store, Preparation Area, Main Kitchen Area, Washing Area, Catering Supervisor's office, Dietician's Office, Staff locker, Toilet, Office, Dispatch, Housekeeper's office, Staff Canteen.

#### 2. Scope of Services

2.1 The proposed buildings shall be designed as a Green Building with minimum 3-Star GRIHA rating with approval from appropriate authority. The selected Firm is expected to prepare MASTER PLAN & Architectural design including all drawings and designs for structural, plumbing, fire fighting, drainage, landscaping, Public Address (PA), Fire Detection & Alarm (FDA), Internal and external electrification, substation, HVAC, Labs, furniture specs, layout, Equipment planning, Laundry, Gas Manifold, tender documents including conditions, specs and BOQ for Proposed work. The scope also includes pre and post construction approvals from local and statutory bodies. Fee paid to local bodies shall be reimbursed/ directly be paid on actual basis.

The Concept plans for the above mentioned Buildings and Facilities should be based on the MCI guidelines and Client's requirements. The prepared enlarged concept plans should be so detailed that the selected implementation agency is in a position to assess his exact scope and quantum of work and also to enable the Client to award the work to the agency at a fairly comparable cost. The broad scope of work shall include but not limited to the following:

- i) Architectural Planning and Design. Incorporate any changes, modifications etc. suggested by the Client/ HSCC. Prepare plinth area rate estimate as per applicable B S R of Public Works Department, Govt. of Rajasthan norms. The estimate shall also include the non-BSR items on prevailing market rate along with justification, specification. Prepare detailed Project Report (DPR).
- ii) Structural Designs
- iii) Electrical systems including power distribution and complete internal and external lighting, lifts, fire detection and alarm system, intercom system, acoustic and public address system, closed circuit television, channel music and other electrical / electronic control and display systems including metering facilities, generators, Public Address System, Fire Detection and Alarm, U.P.S. stabilized power conditioners, air conditioning, air cooling, heating and ventilation system, Building Management System.
- iv) Locational, architectural and structural planning of specialized services such as IT, HVAC systems, pipelines, water treatment, Sewage treatment, rain water harvesting systems, Laundry, CSSD, Gas Manifold etc
- v) Sanitary, Water supply and sewerage, plumbing and fire fighting systems including fire protection.
- vi) Signage, Graphic, landscaping, etc.
- vii) Passenger/service/Bed lifts wherever required.
- viii) Gas pipelines (air, Oxygen, Nitrogen, Vacuum exhaust) etc.
- ix) Security surveillance systems, Intelligent devices for doors, gates etc
- x) Design of appropriate conduit system for transporting specimen from wards to concerned laboratories.
- xi) Any or all services not specifically mentioned herein but required for the proper and successful completion of the project in accordance with international standards, excluding however, lab and office furniture and lab equipment and instruments.
- Xii) Detailed topographical survey, Geotechnical Investigation and Ground water survey and submission of detail reports. A & D Consultant shall conduct re-test (if required) of Soil Investigation & verify these results at the final structural designs stage at their own cost. HSCC/ Client shall not be liable for any claim for the inadequacy & in accuracy of the test results.

#### 2. Preparation of Master Plan and concept plan

Preparation of list of spaces in consultation with Client

- Preparation of master plan of whole area including area statements
- Preparation of Building wise Floor plans

- Preparation of Elevations and Sections
- Preparation of details required to execute the work.
- Preparation of Room wise furniture (including office and Lab) Lab equipments planning, layout and service requirements.
- Structural details.

#### **Services Concept Planning**

- Planning services like HVAC, Electrical, plumbing, Fire fighting, Lifts, and other services as per scope of work including Computerization, Communication, Public address, Security(CCTV and Access Control), Building Management system, Solar energy application, Fire Detection & Alarming System, Laundry, CSSD, Gas Manifold, IT etc
- Planning and coordination of various services

#### **Presentations and Models**

- Preparation of Models and Walkthroughs
- Preparation of 3D views and blow ups of typical and critical areas

#### Lab and other Equipment, furniture, etc Planning and specs

Preparation of Room wise layout and specs for major areas

#### 2.1 External Services Schematic Planning

- > Planning of additional services including buildings for electric Sub-stations, DG sets, UPS, AC plant etc.
- Planning and preparing layouts for external services like water supply, drainage, ETP including Recycling, Rain water Harvesting, Horticulture & Landscaping
- > Schematic design of all other services not covered above but required to make the Medical College & Hospital functional.
- > Traffic movement for services, staff, public and also incorporation of parking norms.
- ➤ The Master Plan should clearly demonstrate the activities of different phases considering the continuity of the activities for the overall system.

The scope of work also include following:

Bills of Quantities (BOQ) duly priced along with takeoff sheets. All estimates shall be prepared on the basis of B S R of P W D, Govt. of Rajasthan rates, norms wherever applicable and on the basis of market rate analysis where Central/state schedule of rates etc. are not applicable. These estimates should be comprehensive and should include for all items. Detailed analysis for the item not included in state schedule of rates/DSR etc. shall have to be submitted.

#### 2.2 Approval From local Authorities

> Obtain all necessary approvals and Clearances e.g. Municipal Committee, Fire Department, Airport Authority, EIA, Pollution Control Board, TERI (3-star GRIHA rating, Green building), forest department, aviation, heritage, Highways authority etc. from concerned statutory authorities applicable for that area for construction of the buildings and services proposed under the project to enable to start the construction and also to enable client to occupy and commission the building with services without any difficulty.

#### 2.3 Specifications for Building, Services and Equipment in the scope of work

- Preparation of Data sheet showing Room wise and Building wise finishing, flooring, Door, window and other high end Inventory schedule
- > Preparation of detailed Technical Specification for civil, electrical, HVAC, Laboratory etc works and services for major items etc.
- > Specifications of services as per prevalent latest standards
- > Approval for all specifications to be accorded by the client/ HSCC.

#### 2.4 Estimate and Costing for all services in the scope

- Preparation of Area statement floor wise
- Preparation of Building cost based on latest Rajasthan Public Works Department (RPWD) Schedule of Rates as required by the Client and analysis of Market rates for non schedule items
- Preparation of initial Cost estimates for various Internal and External services
- > Preparation of detail cost estimate based on schedule of rates & market rates.
- > Preparation of cost estimate during execution of work as per actual site requirement enabling client to keep the cost within the approved amount.
- Preparation of rate analysis & justification statement.

#### General

- Concept report to be submitted
- > Drawings of Floor plans to be at 1: 200 and 1: 100 scale
- > Typical part details at 1: 50 scale
- > System diagrams for services to be prepared
- > Equipment layout drawings to be at 1: 100 scale for major areas
- ➤ Energy efficiency and Green concept to be adopted and explained as per guidelines of TERI (The Energy Research Institute) who has developed a tool for measuring and rating a building's environment performance in the context of local building practices and degree of greenness.
- > Drawings and models required by Statutory bodies will be prepared by the Architects according to the sizes/scales required by them
- > Six sets of all drawings and a CD of the same will be furnished by the Architect free of cost.

#### 3. ARCHITECTURAL SERVICES

- 1 Preparation of Master Plan
- 2 Ensure that the various building engineering services are suitable and economically designed without any discrepancies between the structure and finishes, and the requirements of service installation.
- 3 Ensure that the nature, position, and appearance of all controls of piped services and electrical installation satisfy user and aesthetic requirements, and ensure that adequate coordination drawings are included.
- 4 Develop the landscaping & Horticulture details separately.
- 5 Develop the interior details as per requirement and the type of equipment(s) planned.
- 6 Buildings with easy access to physically challenged persons, as per GOI guidelines.
- 7 Obtain information required for statutory applications under planning and building acts and any other statutory requirements.
- 8 Prepare production information including drawings, schedules and specification of materials and

workmanship; bills of quantities etc. in sufficient detail to enable work to progress. Prepare construction/ Working drawings.

#### ➤ Site Plan

- o Co-ordination of the proposed building.
- o Room layout in co-ordination with various services and levels.
- o Blow up of road junction / parking area and other such area as required.

#### ➤ Detailed building services

- o Floor plans (fully coordinated with all services/disciplines)
- Elevations & Sections
- Wall profiles
- o Doors & Window details
- o Stairs/Ramps/Lifts details
- o Details of building parts/ Areas with special treatment
- Toilet details
- o Details of bio-safety/ bio- technology labs
- Flooring pattern and details
- Dado details
- False ceiling details
- o Details of furniture and equipment layout
- Furniture & Signage's details
- o CSSD, Laundry, Modular Operation Theater, Gas Manifold etc
- Landscape & Horticulture
- Detailed drawings of landscape including blow up of critical area/ landscapes/ plantscapes/ detail coordination with all external services
- o Horticulture details etc.

#### 4. CIVIL & STRUCTURAL ENGINEERING SERVICES

#### General

- Selected Architect shall perform all the Civil & Structural design work necessary by utilizing the most economical, effective and widely accepted engineering concepts as per latest relevant IS Codes & MCI guidelines of specified structure like CSSD, Laundry, Operation Theater etc and shall at all times show a high degree of professionalism in the work. All structural designs/drawings area to be vetted by any IIT or any other agency nominated/approved by the Client.
- 2. The Architect will be fully responsible for the design of all the Civil & structural engineering works. The services to be provided by them shall include but not limited to the following:
  - a. Design basis

- Topographical survey, soil characteristic and geo physical investigation.
- Conduct any other/ additional surveys, geo-technical tests including any additional soil
  tests if required, model tests, laboratory tests, in-situ tests, analysis and/or other
  investigations as required for determining the basis of technical and economic criteria
  for the appropriate measures to accomplish economic designs.
- Planning for the structural arrangements with the architectural design
- Co-ordination & finalization of arrangements plans
  - Beam & Column size finalization
  - Beam & Column location
  - Slab sunk & projections
  - Equipment load estimation
  - Any other misc. characteristics of the buildings
  - Finalization of design basis & structural systems

#### b. Design development

- Structural framing for Analysis in tested structural Analysis software
- Design of beams & columns based on structural Analysis output of the software
- Workout of support reactions for the design of foundations from the structural analysis software
- Design of foundations
- Design of slabs
- Design of staircases/ramps etc.
- Drawings at working stage:
- Foundation plans & details
- Column layout plans
- Framing plans (fully coordinated with all disciplines)
- Floor slab structural details
- Column & beam structural details

The construction of the project shall be in accordance with all the applicable national codes and all the buildings/structure shall be seismatic resistant as per relevant zone of Pali area.

#### 5. QUANTITY SURVEYING SERVICES

#### i) General

The Architect shall provide all the work and duties in relation to the field of Quantity Surveying and shall at all time show a high degree of professionalism in his work.

The services to be provided by the Architect shall comprise of, but not limited to the following:

#### ii) Cost estimating & financial services

- a. Initial Cost planning for the project based on Rajasthan Public Works Department rates, including the cost of associated design services, site development, landscaping, furniture and equipment; cash flow requirements for design cost, construction cost, and cost in use etc.
- b. Carry out inspections and surveys; prepare estimates for the buildings, services, electrical, PHE, HVAC and all components of the building based on latest Schedule of Rates and market rates for items not available in latest Schedule of Rates.
- c. Cost justification based on market rate analysis after opening of tender for all the items as per current market rates and trends.
- d. Prepare and submit cost estimates for the project at outline scheme design, preliminary design stage and final design stage.
- e. Cost planning, cost monitoring and cost reporting during the various stages of design to ensure that there is no over-run in project cost and to take appropriate measures to achieve it.
- f. Prepare complete tender documentation including specifications, detailed Bill of Quantities, Conditions of Contract etc. Technical specs, approved makes, BOQ formats, contract documents formats and clauses to be approved by the Client.
- g. Advise on any aspect that can influence the project's cost and measures that can be taken in order to ensure that the budget for the project is not exceeded.
- h. Preparation of contract documentation.
- i. Prepare and submit contract documents for signature, if required.
- j. Carry out such other duties as may be required in the pre-contract stage on this project.
- k. Attending site meeting, coordination meetings and any other meetings as and when required.
- I. Assist the Client in replying queries from audit/internal control departments and other technical committees of statutory authorities like CTE/CVC. Attend meetings in connections when requested to do so by the Client and audit/internal control departments. Prepare and submit reports to the Client in connection with queries from audit / internal control departments.
- m. Carry out such other duties as may be required in the post contract stage on this project.

#### 6. ELECTRICAL

#### SCOPE OF DESIGN FOR ELCTRICAL SERVICES

The broad scope of services under this contract shall be :-

- Complete Planning & Design of Electrical system and obtain all Statutory approval and conceptualization based on customer's conceptual design and specifications in compliance with state electricity board/any other statutory authorities/MCI Norms (Internal & External Electrical Services)
- ii. Preparation of Detailed bill of quantities, tender document etc.
- iii. Preparation of detailed drawings, site layout, Modification to the drawings during execution if required and also assist HSCC during the execution.
- iv. Sourcing of materials.
- v. Marking and execution in accordance with design.
- vi. Execution of planting schemes.

#### STATUTORY CLEARANCES

The Architect will be responsible for coordinating with local agencies and providing drawings, documents, certificates etc for getting statutory clearances and connections from Municipal Corporation, Chief Fire Officer, Director of Explosives, , State Electricity Board etc. obtaining all statutory clearances for the project.

#### **DETAILED SCOPE OF DESIGN INCLUDES THE FOLLOWING:**

Preparation of all drawings good for construction for internal and external works i.e electrical, Telecommunications, networking, security system, HT & LT work etc including technical specifications of work.

Preparation of detailed electrical layout drawings to prepare tender documents reflected ceiling plans at each level, electrical lighting /switching plan including all DB, MV Panel, earthing and schematics details.

Preparation of detailed designs drawings and documents for electrification, fire detection ,lifts, telephone, EPABX, LAN, networking, public address system and other specialized services etc. as per the requirements of the project, suitable for construction and release to site.

Preparation of submission of detailed design , drawings and documents for all external utilities such as street lighting, telephone system, HT Panel, Transformer or any other specialized services as per the project requirements suitable for construction and release to site including getting necessary approvals.

Preparation of detailed specifications, Bill of Quantities, Rate analysis.

Preparation of Tender drawings, Technical specifications, details of vendors/manufacturers for materials and equipments and tender documents etc. Assistance to HSCC in providing clarifications to bidders, pre-bid meeting and specifying the construction contract.

The approvals of local body authority are required on all drawings, specifications, documents etc and Architect shall be responsible for modifications, incorporation of suggestions etc.

The Architect shall supply all the design calculations /computer input and output giving specific reference to BIS/NBC along with all soft copies.

#### **SERVICE DESIGN**

To carry out basic and detailed designs, Technical specification and Bill of quantities along with market rate justification of comprehensive electrical power distribution scheme, indoor and outdoor lighting, lightning protection and earthing systems of all the buildings in accordance with the relevant Indian regulations and Standards. The work shall include, but not limited to, the following services:

- a. Design and draw up preliminary schemes on the electrical requirements and on the rating of all the apparatus/ equipment that will be installed in the buildings.
- b. Design the distribution systems and prepare single line diagrams with details of accessories and equipment.
- c. Specify the details and capacities of HT panels, Transformers, LT panels, standby diesel generators and fuel intake, and to specify the type of supply arrangement for incoming power supply, interlocking arrangement between HT panel, transformer, LT panel & DG sets.
- d. Design the Sub-station comprising of the HT panel room, transformer room, LT panels room, and generator room and to specify the necessary switchgear and control/ changeover panels, capacitor banks, bus duct, essential and non essential panels as necessary with the appropriate load shedding.
- e. Make detailed specifications of all electrical items, including outdoor / indoor equipment, essential and non essential panels, power control centers, capacitor panels and the corresponding bill of quantities for the various items.
- f. Design and prepare detailed layout drawings for the individual power. Indoor and outdoor lighting, lighting protection and earthing system with separate earthing for the computer network and for other equipment as required.
- g. Telephone, Intercom & Communication system
- h. Telephone layout and telephone equipment including conduit and accessories layout for the telephone system and any protective devices battery back-up required.
  - Design the EPABX room. Prepare conduit layout of cables and terminals inclusive of a fiber optic or other special data transmission cables for system required.
  - Intercom layout and intercom equipment including conduit and accessories layout for the intercom system and any protective devices required.
  - Investigate the needs of each site in terms of communication facilities and call bells required
    and to specify same and the corresponding equipment and accessories together with
    preparation of conduit and accessories layout necessary.
  - Prepare the specifications and bills of quantities.
  - Sound Diffusion System. Carry out basic and detailed design for the sound diffusion system

required and this shall be inclusive of, but not limited to, the following:

- Plan showing the routing of conduit, wiring, position of speakers, central console etc.
   indicating block diagram of PA system.
- Cable and conduit layout, sound equipment and visual display system together with any protective devices required.
- Prepare specifications and bills of quantities.
- Check and approve detailed drawings of the suppliers and manufacturers;

#### j. Fire detection & Alarm System

- Design the FDA control room layout.
- Prepare working drawings (Floor wise) indicating the zones, location of the fire alarm sensors, Response Indicator, Manual call points, Hooters, their conduits and wiring and location/details of FDA control panels.

#### k. Lifts, water pumps

- Specify the capacity and type of lifts/escalators to be provided and prepare layout for the necessary machine areas.
- Specify the type / system for hot water supply to showers, kitchen and other areas (use of solar water heater shall be incorporated in the design)
- Finalize the design for lifts and escalators installation as per the Statutory/local regulations.
- Prepare specifications and bills of quantities.

#### I. Cable TV/Dish Antenna System

- Prepare working drawings indicating the locations of TV points, Central panel/racks of dish antenna.
- Fixing details of dish antenna.
- Prepare specifications and bills of quantities.
- Nurses Call system
- Assess the requirement of nurses call system at different locations (ICU, ICCU, wards etc).
- Prepare the plan indicating the location of the console panels, wiring diagram, conduit layout etc.
- Prepare specifications and bills of quantities;

#### n. Lightning Protection and earthing System

Lighting protection system shall be an advanced integrated lighting protection system and it shall consist of a dynamic air dynamic air termination which acts as a preferred strike point, a surge conductor to minimize side flashing, an earthing system, protection from power surges at point of electricity line into the facility and protection from surges and transients on oncoming

telecommunications and signal lines. The work shall include, but not limited to, the following

- Prepare plans showing internal/external earth grid, earth electrodes and lightning protection with size of conductors and details of each electrical and lightning arrestors along-with details of earthing pits.
- Earth system shall be as per relevant Indian Standards and Indian Electricity rules.

#### o. External Lighting

- Assess the external lighting requirement for roads, parking, buildings etc.
- Prepare plans indicating the road lighting with circuit details, typical pole detail with type of fixture, cabling, earthing etc.
- Prepare the specifications and bills of quantities;
- Check and approve detailed drawings of the suppliers and manufacturers;

#### p. UPS back-ups

- Identify the sensitive/critical equipment and plan a detailed power back-up programme through centralized or localized system.
- Prepare the plan indicating the locations of UPS rooms in the buildings, UPS room layout,
   Single line diagram/Power flow diagram.
- Prepare technical specifications and bills of quantities

#### 7. IT SERVICES

Prepare an Information System strategy plan carrying the IT needs of the Medical College & Hospital. Prepare System requirement specifications document including up-gradation/expandability strategies for the future. Carry out the basic and detailed design specifications of the application of IT/computerization system/network related to scope, system architecture, and application system. The scope of the services includes but not limited to the following:

- 1. HMIS (Hospital Management and Information System) for Hospital including Data centre, Computer Hardware & Software requirement for implementation of HMIS.
- 2. PACS (Picture Archival and Communication System) for the Hospital and integration with HMIS.
- 3. Development of Computer Network Infrastructure LAN and Wi-Fi System for Network and Internet facility in the campus (Cable based and Wireless Network both). Cable based Network is also to be used for the HMIS and PACS.
- 4. Queue/Token Management System for OPD and Doctors' room
- 5. Library Management System / Automation
- 6. Education Management System
- 7. Telemedicine

Prepare Technical Specification and Bill of Quantities for complete IT requirements based on the latest technology available.

#### 8. MECHANICAL SERVICES

#### **SYSTEMS & SERVICES**

The following Systems & Services play important roles in proper and efficient functioning of the Hospital.

- 1. Modular Operation Theatre (OT) and Integrated Modular OT
- 2. Central Sterile Supply Department (CSSD)
- 3. Medical Gases Manifold System
- 4. Kitchen
- 5. Laundry
- 6. Bio- Medicals Waste Management System
- 7. Mortuary Chamber (4 Body).

The considerations for each of the above services are explained in the following sections.

#### **Modular Operation Theatre**

The objectives of Modular OT are Infection control, Promoting high standard of asepsis, Facilitating coordinated services, Ensuring maximum standard of safety, and Optimizing utilization of OT with flexibility and staff time, Optimizing working condition, Ensuring functional separation of spaces, Patient and staff comfort in terms of thermal, acoustic and lighting requirements, minimizing maintenance and regulating flow of traffic. Modular OT will be constructed for all operation rooms except Minor OT and emergency OT Labour Room etc of the hospital.

The prefabricated modular construction for walk able Ceiling and Wall panels will be with PUF (Poly Urethane Foam) sandwiched double skin constructed with AISI-304 Stainless Steel/Solid Mineral Composite Sheet to set-up Operating room. The Operation theatre floor finish will be laid with seamless conductive PVC tiles on a semi-conductive adhesive base.

The Ceiling Air Filtration System using HEPA filters will produce homogenous low turbulence unidirectional laminar flow of sterile air with differential velocities decreasing from centre to perimeter of the theatre. Such Clean Ventilation System will create draft free comfortable room climate and minimal undisruptive noise level. The minimum positive pressure will be maintained inside the operating room. The temperature and humidity will be maintained at comfortable range inside the OT all the time.

View window with horizontal Venetian blinds sandwiched in two parallel toughened glasses.

Peripheral light fixture flushed with the ceiling in the operation theatre will be suitable to required illumination of OT.

The Surgeon Control Panel will be configured to incorporate all the services required by the staff in the Operation theatre. The Control Panel will comprise of following services:

- Day Time Clock
- Time Elapse Day Clock
- General Lighting System
- Hands free telephone set with memory card

- Temperature and Humidity Indicator with Controller
- Medical Gas status/alarm
- Room Pressure indicator
- Music control

Modular Operating room will be equipped as following:

- Wall & Ceiling construction
- Integrated Air & Light theatre ceiling
- Antistatic OT flooring with PVC tiles
- Anti bacterial Painting
- Automatic hermetically sealed sliding Door
- Distribution Board
- X-Ray Viewing Screen
- -Digital Viewing Unit along with integrated CPU
- Hatch/Pass Box,
- -Writing Board (List Board)
- Electronic Touch Screen (Work Station)
- Storage Unit,
- Scrub Station
- Ceiling OT Light with camera and Monitor Medical Gas Alarm System
- -Anaesthesia Pendent
- Surgeon Pendent
- Internal Ducting
- Electrical Wiring

#### **INTEGRATED MODULAR OT**

Communication, Conferencing through OT Navigation System with HD Camera in addition to the components/equipment as mentioned above for Modular OT.

#### **MINOR OT**

Antistatic conductive flooring, Epoxy/PU painted wall, False Ceiling, X-Ray Viewer, Gas Outlets. Automatic hermetically sealed sliding Door, Storage Unit and Ceiling OT light.

#### **CENTRAL STERILE SUPPLY DEPARTMENT (CSSD)**

Central Sterile Supply Department (CSSD) will comprise the services to receive, store, process, sterilize, distribute and control the supplies and equipment, both sterile and non sterile- to all the departments of the Hospital for care and safety of the patients from infection. CSSD is an absolute necessity in a hospital where major surgeries are carried out, an intensive therapy ward is fictional and casualty and emergency services are provided for infection control.

The following factors have been considered for planning and designing of the CSSD.

#### **Work Load in CSSD**

The Various Functional Departments of the hospital which will generate solid items are as under:

- Operation Theatres
- ICU
- Labour Room
- Wards
- OPD
- Other Specialties & Treatment Units

#### **Location of CSSD**

As OT is the major consumers of CSSD, One CSSD will be located at the Basement near the lift leading to the OT Complex of the Main Block and another CSSD will be set up to cater for OTs of Maternity Block.

#### **Process Flow in CSSD**

- The functional area in a CSSD has been considered such that the components/ material flow in a logical sequence from receipt of contaminated and used goods to the storage sterile and ready to issue to the end users.
- The basic principle is that there should be no mixing or flow crossing each other, of sterile and contaminated goods for prevention from cross contamination.
- Separate entry/exits will be provided for personnel in process area and sterile area.

#### **Functional areas within the CSSD**

CSSD will be divided into following area/zones:

- Contaminated goods receipt Sorting area
- Washing, Cleaning and Sterilizing area (Process area)
- Sterile area for storage of sterile goods
- Sterile goods issue area
- Entry exits for personnel into process and sterile area

#### **Special Requirements**

Sterile Area will be provided with following special requirement:

- Super finishes with Epoxy/Kota flooring and epoxy/PU paint on walls at the CSSD room
- No particle shredding materials will be used for construction, storage racks, doors etc, in the sterile area
- The HVAC System will be provided for temperature and humidity controls
- The HVAC System will be for continuous operation to maintain the sterile conditions Fine filters will be provided for supply air system
- Electrical light fixtures will be flushed type to prevent accumulation of dust particles. Separate entry/ exist with provision for change/gowning will be provided for entry.

For other areas of CSSD

- The CSSD will be provided with good lighting
- The area will be well ventilated
- Easy accessibility to lifts will be provided for transportation of material to OTS and other units of the hospital

There will be two CSSD in the hospital. All the major equipment for CSSD and the related furniture of CSSD will be made of anti-rust, anti-corrosive material like AISI -304 Stainless Steel. CSSD room will be equipped with the following:

- Rectangular Autoclave
- ETO
- -Washer Disinfector
- Ultrasonic Cleaner
- Drying Cabinet
- -Control and Packing Table
- -Wash Station
- Air Spray Gun Rinser for Sink
- -Gauge Cutting Machine
- Storage Rack
- -Carriage & Trolleys

#### 9. HVAC SERVICES

#### 9.1 General

The Architect shall be responsible, for all mechanical services including HVAC. This includes:-

- a. Design of Heating, Ventilation & Air-conditioning systems as necessary and as per guidelines (Central and / or individual air-conditioning Systems) including pressurization of lift wells, ventilation of toilets, basements and other areas etc. The work shall include design of specialized air conditioning, ventilation and air filtration systems for the project.
- b. Other Mechanical Services as required for the Medical College & Hospital.

#### 9.2 Air-conditioning requirement:

The essential areas of the building under project shall be designed for air conditioning. However, it is proposed to keep structural provisions for air-conditioning of all areas.

a. Codes and Standards

The design shall be done taking into account the following latest revisions applicable to the region in which the project is located.

- ASHRAE
- ISHRAE

- Local by-laws and factory Act.
- Indian Standard Specifications / codes.
- National Building Code 2005.
- Manufacturers Instructions and guidelines.
- CPCSEA guidelines for animal house.

#### 9.3 Services

To carry out basic and detailed design of the required Heating, Ventilation & Air conditioning system of the Medical College & Hospital. This shall include, among others, but not limited to the following services:

- (a) Carry out preliminary and detailed design and prepare drawings indicating the details as mentioned below:
  - Heat Load calculations
    - Summer
    - Monsoon
    - Winter
  - Air Quantity calculation
  - Equipment selection details
  - Layout drawings for equipment, Air Handling units and ventilation fan rooms etc. Layout drawings of ducting, piping distribution, electrical distribution
- (b) Specify the type of systems appropriate and to calculate the capacities of the A.C. plants and units required and according to specific requirement of the areas to be air-conditioned, taking into account, the necessary number of air changes that may have to be applied for certain specific/critical areas as per guidelines.
- (c) Design and specify the type of special air conditioning, ventilation and high efficiency air filtration system as required for the Bio-safety Laboratories, Animal House and associated areas.
- (d) Design ducting, piping and A.C. Plant room layouts floor wise and to specify all electrical requirements of the A.C. systems.
- (e) Prepare A.C. system details in plans and sections.
- (f) Design pressurization system for lift lobby and ventilation system for toilets, basement and other areas and according to the specific requirements of the areas to be ventilated.
- (g) Design and specify the cold rooms in the Pharmacy and Kitchen.
- (h) Design and specify the appropriate cold room with all necessary facilities.
- (i) Design Considerations:
  - All the equipments etc. shall be suitable for 415 V, three phases or 220 V, Single phase, 50 Hz A.C. supply.
  - Energy efficient chillers, VF drive for motors, Insulation of roof for reducing heat ingress & reducing load on AC, Triple glazing of windows on sun facing side and double glazing on other sides, Air tight windows and doors for reducing leakage of air and dust.

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- All HVAC equipments and systems shall comply with the mandatory provisions and prescriptive criteria of ECBC, 2007.
- Natural ventilation shall comply with the design guidelines provided for natural ventilation in the National Building Code of India 2005.
- Cooling equipments shall meet or exceed the minimum efficiency requirements laid down in ECBC, 2007.
- Where ever used, the Unitary Air conditioners will meet IS 1391 (part-I), split air conditioner shall meet IS 1391 (Part –II), Packaged air conditioner shall meet IS 8148.
- If used all cooling towers shall have either two speed motors or variable speed drives controlling the fans as prescribed in ECBC, 2007.
- All HVAC system will be balanced in accordance with provision of ECBC, 2007.

The amount of fresh air intake shall be optimized to provide a suitable environment for specific areas of the buildings depending upon the function of the area, the number of people involved and the degree of hazard to which patient is subjected.

The air circulation system shall be designed using high efficiency filters to prevent contamination whether it is from outdoor air or from re-circulated air within the space.

#### • GRIHA criteria:

- Optimize energy performance of building within specified comfort
- Renewable energy utilization
- Renewable energy based hot-water
- Minimize ozone depleting substances
- Energy audit and validation
- Operations and maintenance protocol for electrical and mechanical equipment
- Innovation

Any work not mentioned specifically but essentially required for meeting the purpose and the intent of HVAC system shall be deemed to be included in the scope of works.

- (j) Special Requirements /consideration for Laboratories/Animal house:
  - 1. The State of art laboratory, Bio-safety Laboratories and Animal house shall be designed in accordance of latest WHO and CDC and CPCSEA guidelines and
  - Obtain approvals, validations of Animal house, State of art laboratories and Bio-safety Laboratories from local and statuary bodies.
  - 3. Consideration of high sensible heat load for various research equipments.
  - 4. Consideration for bio-safety cabinets.
  - 5. Air locks (i.e. vestibules with a door at each end arranged and provided with door-closing mechanisms so that both doors are not open at the same time) will be used to minimize the

- volume of supply air required.
- For the spaces where direction of airflow between spaces is deemed critical, air flow monitoring devices shall be used to signal or alarm inadequate or wrong direction of air flow.
- 7. Exhaust from the high containment labs shall be discharged from stake with high velocity at least10 feet above the adjacent roof line and so located with respect to opening and air intakes of the laboratory or adjacent buildings to avoid re-entry.
- 8. Three level filtration by HEPA filters in critical areas.
- 9. Gas tight dampers in supply and exhaust duct work to allow decontamination of the BSL-3 laboratory.
- 10. The provision for bag-in, bag-out type HEPA filters for high containment laboratory i.e. BSL-3 labs.
- 11. Noise level in laboratories considered as per NC levels suitable for scientific work.

#### 4.0 Fire Safety

For fire safety, shall be incorporated in design as per NBC and local fire authority norms. Also the air conditioning system shall be electrically interlocked with the central fire alarm system of the building as per guidelines

- \* All the materials used for ducting and insulation shall be fire retardant type (class O as per BS 476 part 4, 6, 7) and CFC free.
- 5.0 Special considerations for hospital design

The Air-conditioning system design shall take into consideration the latest ASHRAE guidelines on following aspects:

- 5.1 Application of air-conditioning to health facilities presents many problems not encountered in conventional comfort air conditioning systems. The air conditioning systems shall be designed taking into consideration the following factors:
- 5.1.1 The need to restrict air movement in between various departments and zones to prevent cross contamination.
- 5.1.2 The need to maintain different temperature and humidity requirement for various areas.
- 5.1.3 Specific requirements for ventilation and air filtration to dilute and remove contamination in the form of odour, airborne micro organisms and viruses, and hazardous chemical and radioactive substances.
- 5.1.4 The need to provide controls for maintaining accurate control of environment conditions.
- 5.1.5 The need to design systems which should be easily maintained by the hospital staff.
- 5.1.6 The need to maintain relative pressure differentials with respect to adjoining areas and the outside.

- 5.2 The air circulation systems shall be designed using high efficiency filters to prevent bacterial contamination whether it is from outdoor air or from re-circulated air within the space.
- 5.3 The amount of fresh air intake shall be optimised to provide a suitable environment for specific areas of the hospital depending upon the function of the area, the number of people involved and the degree of hazard to which the patient is subjected.
- 5.4 All operation theatres designed on laminar flow principle with supply air filtered through three sets of filters viz:
  - a. Pre filters of 90 % efficiency down to 10 micron.
  - b. Fine filters of 99.9 % efficiency down to 5 micron.
  - c. HEPA filters of 99.97 % efficiency down to 0.3 micron.
- 5.5 The operation theatres shall be designed on air recirculation system.
- 5.6 The operation theatres, ICU's and isolation rooms shall be designed to maintain high positive pressure with respect to the surroundings to ensure that no contamination should enter the OTs.
- 5.7 Air supplied to ICUs shall be filtered through two sets of filters:
  - a. Pre filters of 90 % efficiency down to 10 micron.
  - b. Fine filters of 99.97 % efficiency down to 0.3 micron.
- 5.8 Separate air systems for different departments shall be provided to provide flexibility of operation and prevent cross contamination.
- 5.9 Aluminium ducting shall be used for supplying air to operation theatres to reduce the risk of bacterial formation in the air handling equipment and the ducts.
- 5.10 High pressure, all enclosed double skin air handling units shall be used for critical areas such as operation theatres and isolation rooms etc.
- 5.11 All the materials used for ducting and insulation shall be fire retardant type.
- 5.12 All supply, return and exhaust air grilles and registers shall be decorative type to match the interiors of the building.

Any work not mentioned specifically but essentially required for meeting the purpose and the intent of HVAC system shall be deemed to be included in the scope of works.

#### 10. PUBLIC HEALTH ENGINEERING

The Architect shall be responsible, amongst others for:

Design of Public Health & Engineering services taking into account various topographical, meteorological, Hydrological etc. reports, identify the source and quality of water, conduct survey of existing water supply system, Sewerage system, Drainage system, Fire-fighting system, other site development works etc. for planning of services

- All the design and drawings should be well coordinated with Architecture, structure and other services drawings.
- c. All designs shall be as per the latest Indian Standards, Local bye-laws and Statutory norms & design & detail drawing shall also be provided to /Client for their approval.
- d. Ensure that the design meets the requirements with regard to future extensions and needs.
- e. Report on Ultimate disposal point, Intermediate rain water harvesting system and Source/availability of electricity, water and other services to be identified.

The services shall include following major components:

- Water Supply System
- Sewerage System
- Drainage System including rain water harvesting system
- > Fire-fighting & Fire Suppression System
- Other site development works
- The specialized water supply, drainage of various labs & animal house.
- Effluent Treatment Plant/Sewage Treatment Plant/Water Treatment Plant
- Soft water supply system
- Road levels & sections etc

#### Services

#### a. Water Supply System

- Calculation of water requirements for domestic, non-domestic and hospital services.
- Design and prepare working drawings of internal and external water supply system including Underground tank, Overhead tank, Water treatment plant, Softener plant, Pumping stations, rising mains, distribution system and internal plumbing, recycling of treated waste water etc. Including revision of drawings as per local authority requirement, resubmission and approval.
- Design of hot water supply system consisting of centralized/ Localized hot water supply system (Solar/Boiler/Geyser etc).
- Design of centralized RO/ Soft water supply system
- Obtain approval from local bodies for Municipal water supply connections, drilling of tube wells etc.
- Prepare specifications and bill of quantities, analysis of market rates as per Rajasthan PWD methodology & with stipulated rate list.
- Getting proof checking of design from IIT or any other agency approved by the Client & modifying the document accordingly if required.

#### b. Sewerage System

- Calculation for quantity of waste water generated from different sources and design waste water treatment plant
- Design and prepare working drawings for internal and external soil/waste disposal systems including revision if any as per requirement of local authority, resubmission and approval.
- Obtain approval from statutory and local bodies for waste disposal.
- Prepare specifications and bill of quantities, analysis of market rates.

#### c. Drainage

- Design and prepare working drawings for storm water drainage including roof drainage, service area drainage and surface drainage including revision if any as per requirement of local authority, resubmission and approval.
- Design and prepare working drawings for rain water harvesting system.
- Obtain approval from statutory and local bodies for drainage connections and rainwater harvesting scheme etc.
- Prepare specifications and bill of quantities, analysis of market rates.

#### d. Fire Fighting & Fire Suppression System

- Design and prepare working drawings for internal and external fire protection and suppression system including hydrant, sprinkler system, CO2 flooding system, pressurization system, fire extinguisher system, UG tanks, fire pump rooms etc. in line with the statutory requirements including revision if any as per requirement of local authority, resubmission and approval.
- Size all equipment required and preparing detailed specifications and bill of quantities.
- Obtain necessary license/permissions from the statutory/local fire authority/bodies etc. as required

#### e. Other site development works

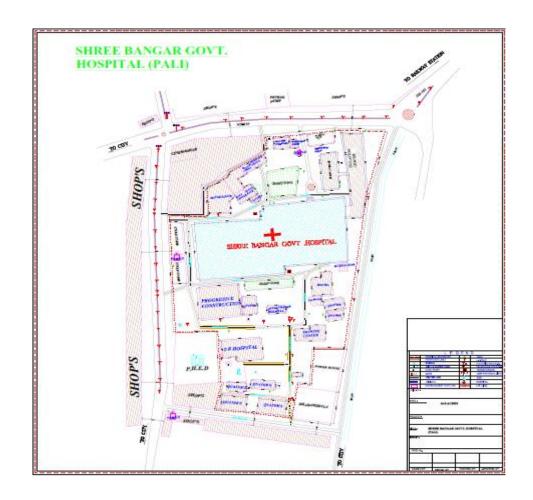
- Design and prepare working drawings (longitudinal & cross section) for roads/ footpaths/ parking areas etc including revision if any as per requirement of local authority, resubmission and approval.
- Design and prepare working drawings of irrigation system for horticulture.
- Design and prepare working drawings for water bodies.
- Design and prepare working drawings for recreational facilities like swimming pool etc. Prepare specifications and bill of quantities.
- Design & preparation of drawing, BOQ for STP, Water Treatment plant based on latest accepted technology & preparation of cost estimate.

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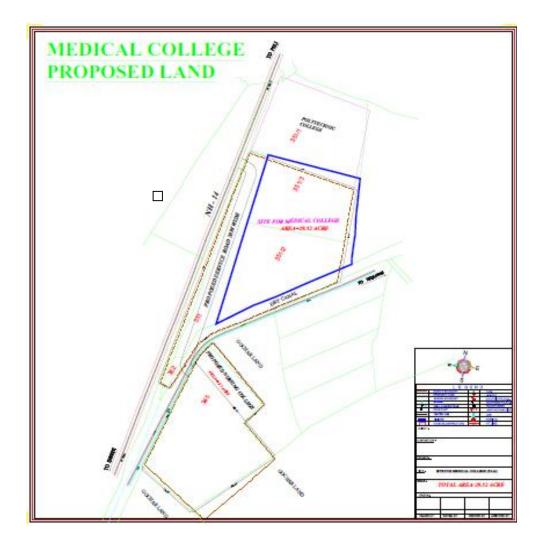
#### 13. LAB WASTE MANAGEMENT SYSTEM

- Collecting client's requirement for Labs & Animal House & modify the scheme accordingly.
- Prepare design, specifications, bill of quantities for lab/ Animal House Waste Management System in line with the latest guidelines of CPCB & Ministry of Environment & Forest notification or any other specific applicable standards for labs/ CPWD & Animal House.
- Obtaining clearances from the statutory bodies

# (Section-VII) Site Plan



EXISTING SHREE BANGAR 330 BED HOSPITAL, DISTRICT PALI



MEDICAL COLLEGE PROPOSED LAND.

## **End of Document**