

**EXPRESSION OF INTEREST
FOR
EMPANELMENT OF CONSULTANTS FOR
ENGINEERING SERVICES
(MAY 2017)**



**HITES
(A FULLY OWNED SUBSIDIARY OF HLL LIFECARE LTD,
A GOVERNMENT OF INDIA UNDERTAKING)
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TABLE OF CONTENTS

| Sr. No. | Items | Page |
|---------|---|------|
| 1. | Invitation of Expression of Interest | 3 |
| 2. | Notice Inviting Expression of Interest | 4 |
| 3. | Empanelment of Consultants for Various Engineering Services | 5 |
| 4. | Empanelment of Consultants | 6 |
| 5. | Classes of Empanelment | 6 |
| 6. | Scope of work | 7 |
| 7. | Eligibility Criteria | 32 |
| 8. | Instructions to Individual Consultants | 39 |
| 9. | Instructions & Guidelines for Submission of Application Form for Empanelment of Consultants | 39 |
| 10. | Conflict of Interest | 40 |
| 11. | Evaluation Criteria | 41 |
| 12. | Application Form for Empanelment | 43 |
| 13. | Annexure-I Organizational details | 44 |
| 14. | Annexure-II Details of Directors/ Partners/ Proprietors | 45 |
| 15. | Annexure-III List of Consultancy Assignments Completed in Last 5 Years | 46 |
| 16. | Annexure-IV List of Major Consultancy Projects/ Assignments In Progress | 47 |
| 17. | Annexure-V Financial Status | 48 |
| 18. | Annexure-VI List of Award Winning Entries (During Last Five Years) | 49 |
| 19. | Annexure-VII List of Consultants Associated on Regular Basis | 50 |
| 20. | Annexure-VIII List Of Works for which GRIHA/ International Ratings for Green Buildings Earned | 51 |
| 21. | Annexure-IX List of International Works | 52 |
| 22. | Annexure-X List of equipment available with the firm | 53 |
| 23. | Annexure-XI Affidavit | 54 |

HITES

(A Fully Owned Subsidiary of HLL Lifecare Limited, a Government of India Undertaking)

INVITATION OF EXPRESSION OF INTEREST (EOI) FOR EMPANELMENT OF CONSULTANTS

1. Infrastructure Development Division of HITES invites EOI from eligible Engineering Consultancy firms/ Individual Consultants for providing consultancy in the various areas of Healthcare, Institutional and other Infrastructure development projects as below:-

- a) 3D modeling design with rendering/ Interior layout design
- b) Town planning/urban development, Master planning
- c) Structural design
- d) Environment Impact Assessment
- e) Quality Assurance/Quality Control/Third Party Quality Assurance
- f) Green Building
- g) MEP (Mechanical, Electrical & Plumbing) Consultants (Comprehensive)
- h) Electrical & LV Services
- i) HVAC System
- j) Fire Fighting
- k) Building Management System
- l) Hospital Planning
- m) Hospital Management Information System (HMIS)
- n) Landscape Design
- o) STP, ETP & WTP Design
- p) Quantity Survey
- q) CBRN Consultancy
- r) Geo Technical Investigation and Topographical Survey
- s) Assistance in Obtaining Statutory Approvals & Liasoning with Local Bodies

2. The proposals duly completed as per prescribed format along with processing Charges must reach on or before 15.06.2017 at 3.00 pm in the office of HITES at Thiruvananthapuram. The opening will be on 16.06.2017 at 11.00 AM at Thiruvananthapuram. The detailed EOI with Annexure may be obtained from website www.hllhites.com & www.lifecarehll.com and Central Public Procurement Portal.

**AVP (IDD)
HITES**

HLL Infra Tech Services Ltd. (HITES)
(A Fully Owned Subsidiary of HLL Lifecare Ltd, A Government of India Enterprise)

NOTICE INVITING EXPRESSION OF INTEREST

Dated 26.05.2017

HITES invites EOI from eligible firms/ Individual Consultants for Providing Consultancy in Interior Design, Structural, EIA, QA/QC, Green building, MEP (Comprehensive), Electrical, HVAC, Town/ Urban Planning, Hospital planning, Fire fighting, STP/ETP/WTP, Landscape design, BMS, HMIS, CBRN, Quantity survey, Geo technical investigation and Liasoning.

For further details visit our website, www.hllhites.com, www.lifecarehll.com & Central Public Procurement Portal.

AVP (IDD)
HITES

EMPANELMENT OF CONSULTANTS FOR VARIOUS ENGINEERING SERVICES

HITES

1. HITES is a fully owned subsidiary of HLL Lifecare Limited (HLL), a Mini Ratna Central Public Sector Enterprise, under the administrative control of Ministry of Health & Family Welfare, Government of India. HLL is a multi-product, multi-division organization with a wide range of healthcare products and services, with presence in more than 115 countries. HLL's purpose of business is providing quality healthcare products and services at affordable prices. HLL's range of services includes Infrastructure Development, Procurement Consultancy, Diagnostics Service and Facility Management. HLL is positioned as a total healthcare solution provider which caters to a well-being of the society at large.
2. HITES is a premier consultancy organization for the development of Healthcare and allied infrastructure facilities.
3. HITES is committed to:
 - a) Provide comprehensive consultancy services in healthcare sector
 - b) Setting up world class healthcare facilities by providing innovative solutions to infrastructure development.
 - c) Maintaining high quality standards and performance
 - d) Providing state-of-the-art healthcare facilities
4. HITES is actively engaged in development of several Healthcare infrastructure projects in the Country. Infrastructure Development division (IDD) provides comprehensive consultancy services in the Infrastructure Development sector. IDD has executed Infrastructure Development projects including Design, Engineering and Civil works as Project Management Consultants/EPC Developer and Construction Agency to the Government of India (mainly Ministry of Health & Family Welfare), State Governments, other Govt. agencies such as ESIC (under Ministry of Labour), NHM (under various state Govts.), NACO, IPC, IMPCL. IDD mostly undertakes Institutional & Healthcare Infrastructure Development Projects. HITES's expertise and experience in providing comprehensive solution to all healthcare related infrastructure initiatives make it a leader in this field.

Empanelment of Consultants

5. HITES invites Expression of Interest for Empanelment of Consultants under different categories for providing Engineering services for their various Health care, institutional and other infrastructure development projects.

Classes of Empanelment

6. The Consultants will be empanelled in following classes, based on their experience and number and types of projects of the relevant field handled by them:

| Class | Financial limit |
|-------|--|
| I | Project with estimated cost above Rs.200 Crores |
| II | Project with estimated cost above Rs.100 Crores to Rs.200 Crores |
| III | Project with estimated cost above Rs.10 Crores to Rs.100 Crores |
| IV | Project with estimated cost up to Rs.10 Crores |

7. HITES reserves its right to allow the empanelled Consultants in any category to bid for the works in next lower/higher category in specific cases on need basis.
8. A non-refundable processing fee of Rs.1000/- (Rupees Thousand only) per Category should be enclosed with all applications by DD, in favour of HLL Infra Tech Services Ltd payable at Thiruvananthapuram. Applications not accompanied with processing fees, shall be summarily rejected.

9. SCOPE OF WORK FOR DIFFERENT CATEGORIES OF EMPANELMENT

a. 3D modeling design with rendering/ interior layout design: The scope includes but not limited to:

- i. Preparation of Conceptual design and drawings with respect to interior design planning, finishing and furnishing work including 3D/walk through presentation
- ii. Interior planning for barrier free movement.
- iii. Designing false ceiling and acoustic walls, if required.
- iv. Electrical installation scheme along with type of luminaries/ other gadgets required.
- v. Preparation of detailed BOQ for above as per market rate/ DSR
- vi. Preparation of specifications

b. Town planning/ Urban development/ Master planning: The scope includes but not limited to:

- i. Preparation of master plan, concept design through schematic design, documents and drawings for approval etc.
- ii. Zoning and demarcation
- iii. Site evaluation, identifying and addressing social issues and heritage concerns
- iv. Planning for storm water collection/ drain system
- v. Project Feasibility study
- vi. Environment impact study
- vii. Planning for Pedestrian / vehicular movement and parking
- viii. Urban renewal
- ix. Landscape and environmental issues
- x. Architectural conservation
- xi. Street/ road design and signage design
- xii. Lighting
- xiii. Solid Waste Management, Waste Water Management Plans

c. Structural Design: The scope includes but not limited to:

- i. Structural design, analysis of multistoried buildings conforming to codal and statutory provisions using latest software.
- ii. Providing good for construction structural drawings.
- iii. Proof checking of structural designs, when basic structural designs are done by another designer.
- iv. Issuance of structural stability certificate.
- v. Site visits during construction as required.

d. Environment Impact Assessment: The scope includes but not limited to:

- i. Undertaking environmental studies and obtaining environmental clearances from statutory authorities..
- ii. Environment Approvals for various infrastructure projects
- iii. Determination of baseline data using primary data generation and secondary data available from various government published reports on air, meteorology, water, soil, flora & fauna, socio-economics, infrastructure, sensitive areas (forests, archaeological, historical, etc.)
- iv. Detailed description of all elements of the project activities during the preconstruction, construction and operational phases. The elements analyzed include the infrastructures of the project including drainage features, roads, waste collection, disposal and management and utility requirements
- v. Identification of the sources of pollution and assessing the impacts on the environment due to proposed project if any.
- vi. Preparation of Environmental Impact Assessment (EIA) and Environmental Management plan (EMP) documents with recommendations on preventive and imitative measures for limiting the impact on environment to the desired level during various stages of project. Development of a suitable post study-monitoring program to comply with various environmental regulations.
- vii. Risk Assessment (RA) and Disaster Management Plan (DMP) describing the probable

risks and preventive & precautionary measures to be followed in the event of emergency situations such as accidents, fire etc

- viii. Submittals & endorsement of conceptual plan – checklist. Technical review by state environment impact assessment authority. Appraisal by state level expert appraisal committee (SEAC).

e. Quality Assurance/ Quality Control/ Third Party Quality Assurance/ Audit

i) Quality Objectives:

1. “The QA/QC services specify the ‘Quality Management’ processes needed for the construction activities conducted by the construction agency engaged by HITES for specific work/project.”
2. “To achieve ‘On time Completion of work/project as per Construction Schedule using ‘Best Practices’.

ii) QA Program shall include elements such as:

1. QA/QC
2. Tender and contract management
3. Testing of materials, field tests, etc.
4. Site Documentation
5. Calibration/verification of measuring and testing equipment
6. Non-conformance report with follow-up action
7. Preventive action, Corrective action

The Scope includes but not limited to:

- i. Monitoring complete quality aspects of construction work as per contract agreement, specifications and codal provisions, site documentation, tests on materials in site lab or third party labs, workmanship, inspection of construction equipment, contract management, site management, safety aspects, etc.
- ii. To carry out/ arrange field tests, NDT, etc. as required.

- iii. The consultant's representative shall check and sign all the important site documents/ records such as Cement Register, Steel Register, Cube Testing Register, Level Books, etc. pertaining to work maintained by the HITES'/agency's representative.
- iv. To carry out/ arrange review/ audit of design, if required.
- v. To resolve any Technical problem/ issue arising during construction.
- vi. To verify physical and financial closure of project and guidance on handing/ taking over of work and settlement of final bill.
- vii. In case of any disputes pertaining to work during execution between the Client and Contracting Agency, consultant's representative may be asked to participate in dispute resolution, joint measurements or verification of the same.

f. Green Building: The scope includes but not limited to:

- i. Detailed study, review of the proposed design details, assist Project Consultant in preparation of bill of quantities, technical specifications and other related tender documents for the construction work including all required services e.g. Civil, Structural, MEP, HVAC, Firefighting System and all other services and suggest amendments / improvements regarding sufficiency or otherwise of the provisions made by the consultants in the designing and tender documents and their conformity with minimum IGBC/GRIHA/LEED rating requirements. Decisions on adoption of the amendments/ improvements shall be based on techno commercial feasibility. The decision of the HITES shall be final in all such cases.
- ii. To provide continuous assistance or support to the Project Architect and other service consultants appointed by HITES so as to achieve minimum required rating or more under IGBC/GRIHA/LEED Green Building Rating System. The deliverable of this service shall include design recommendations & guidelines in the form of presentations, reports, Simulations & drawings etc. as per requirements to enable HITES to achieve the targeted minimum IGBC/GRIHA/LEED specified rating for the Project.
- iii. Preparation, submission and documentation from initiation till completion and receipt of required Green Building Rating for the Project which amongst other

requirements as per IGBC/GRIHA/LEED shall include collection, compilation & preparation of filled-in templates/ documents in close co-ordination with HITES, submission of complete compliance documents as required by IGBC/GRIHA/LEED secretariat in order to get the minimum IGBC/GRIHA/LEED specified Rating for the project. This shall also include all required coordination with Indian green Building Council (IGBC)/Green Rating for Integrated Habitat Assessment (GRIHA) and other relevant statutory bodies inclusive of responding to queries from the offices.

- iv. Consultant shall provide necessary Guidelines, Procedure and formats for records to be maintained (at various stages of the Project) by HITES /Consultant as per requirements of Indian green Building Council (IGBC)/ Green Rating for Integrated Habitat Assessment (GRIHA)/ LEED.
- v. Aspects of IGBC not falling in the purview of either other consultants or the agency shall be attended to in respect of record keeping and feed back to HITES by the consultant. The final custodian of records related to IGBC/GRIHA/LEED shall be HITES.
- vi. Consultant should apprise HITES of the status with regard to implementation of provisions of IGBC/GRIHA/LEED periodically as per the requirements.
- vii. Consultant shall ensure to achieve minimum IGBC/GRIHA/LEED required rating.
- viii. IGBC/GRIHA/LEED Consultant shall work in co-ordination with already appointed consultants or any other consultant / agency appointed by HITES to achieve the stated minimum IGBC/GRIHA/LEED rating.
- ix. Consultant shall be responsible for collection of design inputs / narratives / submittals from the respective design team / consultant / project management team as per the IGBC/GRIHA/LEED requirements and consolidation of complete data in the prescribed format of IGBC/GRIHA/LEED compliances. The consultant shall ensure precision and correctness of data and particulars comprising the compliances through cross validation, consistency verification, to add value to the submittals. The ultimate objective of this service is to submit the complete IGBC/GRIHA documentation to the IGBC/GRIHA/LEED secretariat for enabling the project to get the desired minimum IGBC/GRIHA/LEED rating.

- x. The consultant shall co-ordinate and assists all the third party commissioning or Evaluator Services appointed by statutory authorities like Indian green Building Council (IGBC)/ Green Rating for Integrated Habitat Assessment (GRIHA) etc. any statutory fee payable to the statutory authorities inclusive of their site visit charges, if any will be borne by HITES. Consultant shall incur such expenditure after prior approval of HITES who shall pay/ reimburse the same to IGBC/GRIHA/LEED Consultant on submission of payment receipts and documents towards this expenditure. However, Consultant shall be responsible for all the required coordination and liaisoning work.
- xi. Obtaining minimum specified rating certification as per requirements.
- xii. **The responsibilities of IGBC/GRIHA/LEED consultants shall also include as under:** Consultant shall also undertake the required studies, analysis w.r.t various parameters e.g. buildings and services including infrastructure, energy simultaneously etc. and prepare all reports, submittals as shall be required for obtaining minimum IGBC/ GRIHA specified rating certification as per IGBC/GRIHA Rating System. The study/ report shall be comprehensive and shall include the following:

1. Feasibility:

The agency/consultant will evaluate the certification levels that may be achieved by the project. The feasibility report will comprise of a report, which will divide the overall points in three categories:

- aa) Points that are already planned, if any,
- ab) Points which are possible to plan
- ac) Points those are not feasible for the project.

(This division will be done after discussing all requirements of the certification along with design Team – Owner, Project Consultant’s team comprising of Architect, Landscape architect, Mechanical Engineer, Plumbing Engineer, Electrical Engineer, Fire Fighting Engineer and Structural Engineer, etc.)

2. Facilitation:

Based on the feasibility, the agency/consultant will facilitate the certification process for the project and organize meetings as required for the project.

Certification compliance guidance will be provided to the complete team that includes – Owner, Project Consultant’s team and agencies for the project. A review of design will be done through schematic design, design development, tender documents and during construction. The agency/consultant will help the team to assemble and prepare the documents required for submission to certification authority.

3. Energy Modeling for Design Development:

To quantitatively analyze multiple building system options and evaluate building envelope performance, the agency/consultant will perform energy modeling utilizing multiple simulation tools. The agency/consultant will meet with the design team to discuss the results of energy modeling and sustainability studies to help incorporate these into the design and follow-up with further adjustments to the model. Specifically the following will be evaluated:

aa) Building Envelope Analysis:

The agency/consultant will evaluate the building envelope including glazing, wall and roof insulation, cladding systems, etc. to improve the overall energy balance of the building in terms of heat gain and solar loading. This study is required to be submitted to authorities.

ab) Orientation and Shading Analysis:-

The agency/consultant will evaluate the building orientation and shading devices to optimize energy use in the building. Multiple scenarios will be evaluated and recommendations appropriate for the project within its budget will be made. This study is required to be submitted to authorities.

ac) Day lighting Studies:

The impact of day lighting on the lighting design and the energy performance of the space will be studied and evaluated. Recommendations to enhance day lighting will be made. This study is required to be submitted to authorities.

ad) HVAC System Analysis:

The agency/consultant will work with the HVAC consultant to review multiple options for these systems and make recommendations based on energy modeling. This study is required to be submitted to authorities.

4. Energy Modeling for Submission to Certification Authorities:

aa) Energy Modeling for Energy Savings:

Energy modeling will be done in accordance with the Energy Conservation Building Code (ECBC) of India and ASHRAE 90.1-2004 to establish the improvement in building energy performance over a baseline building. Towards the end of design phase, the agency/consultant will complete the template as required by certification authority to document the result of the energy conservation for the project.

ab) Energy Modeling for Day Lighting: (As required)

Daylight simulation will be done to find out the daylight factor and predicted lux levels inside the occupied space. Daylight levels will be provided room by room as per prescribed time by certification guideline. Towards the end, the agency/consultant will complete the daylight template to document the result of the energy modeling.

ac) Material Assistance:

Materials used for construction form an important part of the measure of sustainability in any building due to the embodied energy they contain along with their impact on indoor air quality. The agency/consultant will work with the project team and vendor to make recommendations on materials use for the project in relation to the sustainable goals of the project.

ad) Material Selection:

The agency/consultant will assist the client in making material selections for a variety of materials used in the project including materials for building shell, flooring, false ceilings, paints, adhesives, sealants, partitions,

furniture, etc. Special attention shall be paid to ensure that these meet the sustainability requirements set forth by the certification guidelines.

ae) **Indoor Air Quality:**

The agency/consultant will evaluate materials and systems and their impact on the indoor environment. Opportunities for use of materials and system, which have low volatile organic compounds and other toxins will be analyzed for the project.

5.Documentation:

The agency/consultant will take all required information from the design team and assemble a set of document that will be submitted to the certification authorities. This includes Pre-certification stage submission, Design stage submission, Construction stage submission, and combined submission whichever is required to get the certification.

6.During Construction:

The agency/consultant will assist Owner and the Project Consultant in construction process. The agency/consultant will provide a check list based on certification requirements and will monitor it periodically. The agency/consultant will visit site half yearly or on demand to assist project consultant/in-charge in implementing works necessary for achieving minimum required IGBC/GRIHA rating. The agency/ consultant will also provide quarterly compliance report on activities required for the certification.

g. MEP (Mechanical, Electrical & Plumbing) Consultants (Comprehensive) :-

1. Provide comprehensive consultancy on all MEP aspects of a project from concept till completion. **The scope** may include but may not be limited to:-

- i. 11 kV/ 33 kV/ 66kV/ 132 kV Substation Works comprising of HT Meter, HT Panel, Distribution Transformers, HT/ LT Cables, Bus ducts, LT Panels, Capacitor Panels, Earthing Network etc.
- ii. Internal Electrification Works including UPS
- iii. Solar PV System
- iv. Low Voltage System including LAN (including optical fibre cabling), EPABX/ Telephone, TV System, CCTV, Access Control, Public Address System, Fire Detection & Alarm System, Nurse Call System etc.
- v. HVAC Works (Water Cooled/ Air Cooled/VRV/VRF/ Packaged System/Precision AC/ Split AC/Window AC etc.)
- vi. BMS Works
- vii. Lift/Escalators/Travellator
- viii. Plumbing & Sanitary Works
- ix. Fire Fighting Works
- x. WTP, STP, ETP, RO
- xi. Solar Hot Water System
- xii. Hydraulic/Electro -Mechanical Car Parking
- xiii. Pneumatic Tube System

2. Concept Planning & DBR Stage:

- i. Analyze Client's requirements; develop and verify Concept Design Data.
- ii. Preparation of Consolidated Design Basis Report (DBR) with conceptual design schemes, SLD/ Schematic diagram and Preliminary Cost Estimates as per latest CPWD Plinth Area Rates (PAR) & Market Rates for various system.

3. Tender Stage:

- i. Design of above mentioned system including detailed Electrical/HVAC load WITH Water Demand calculations in accordance with latest NBC / IS, Local Codes/ Bye laws/ Standards and statutory norms/ regulations with an aim to achieve minimum required IGBC/GRIHA/LEED rating.

- ii. Rating & Selection of all major MEP Equipment.
- iii. Preparation of schematic/floor layouts/Shafts or Cutouts/Service Room Identification etc., getting provisional NOC/approval from concerned statutory authority for commencement of work. Modification, changes/ amendments on drawings in line with requirements of statutory authority/local bodies.
- iv. Preparation of Tender Documents with Specific Conditions of Contract, Technical Specifications, Schedule of Quantities, List of Approved Makes, Tender drawings. Cost Estimate shall be prepared as per latest CPWD DSR rates for DSR Items and as per Market Rates for Non-DSR Items. Market rates for Non-DSR Items shall be worked out on basis of latest quotations from vendors and Analysis of Rate as per CPWD norms.
- v. Preparation of Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors/OEMs.
- vi. Attending Pre Bid Meetings & compiling response to queries raised thereon.
- vii. Assistance in ascertaining bidder's eligibility & technical and financial evaluation of bids for selection of successful bidder.

4. Execution Stage:-

- i. Submission of detailed working drawings for all MEP works inline with BoQ items & quantities required for preparation of shop drawings by Contractor.
- ii. Checking the contractor's shop drawing and approval of GFC (Good for Construction) drawings for execution of works at site.
- iii. Preparation of coordinated drawings/reflected ceiling plans (RCP) requiring coordination between civil design features, false ceiling designs, placements of HVAC grills, diffusers, ducts, other HVAC equipment, light fixtures, fans, cable trays, firefighting pipes, sprinklers, fire alarm system and other minor and major equipment.
- iv. Assistance in assessing credentials of specialized agencies.

- v. Checking Technical Submittal sheets submitted by Contractor & giving observations if any & final approval of the same.
- vi. Visit site as and when required to ascertain that execution of MEP works at site complies with Technical Specifications, Schedule of Quantities & approved GFC drawings and provide report/ suggestions to HITES for necessary remedial action, if any.
- vii. Witnessing Testing/commissioning/balancing/validation process of MEP works and to ascertain that specified design parameters have been achieved.
- viii. Assisting in preparation of snag list at the time of handing over & verifying the handing over documents & as built drawings.
- ix. Assisting in preparation of specifications/BOQ for AMC/CMC/Operations of various MEP Works.
- x. Assistance in providing technical/commercial inputs during arbitration proceedings, if required.

h. Electrical & LV Services: The scope includes but not limited to:

1. Concept Planning & DBR Stage:

- i. Analyze Client's requirements; develop and verify Concept Design Data.
- ii. Preparation of Design Basis Report (DBR) with conceptual design schemes, SLD/ Schematic diagram and Preliminary Cost Estimates as per latest CPWD Plinth Area Rates (PAR).

2. Tender Stage:

- i. Design of complete Electrical & LV System in accordance with latest NBC / IS, Local Codes/ Bye laws/ Standards and statutory norms/ regulations with an aim to achieve minimum required IGBC/GRIHA/LEED rating.
- ii. Preparation of electrical schematic, getting approval from Electrical Inspector/ statutory authority. Modification, changes/ amendments on drawings in line with requirements of Electrical Inspector/ statutory authority.

- iii. Design & Equipment rating selection of all electrical equipment like Transformers, DG Sets, HT Panel, LT Panel, HT/ LT Cables, Capacitor Panels etc. Design of substation Scheme Layouts.
- iv. HT/ LT Cable selection compliant with system short circuit ratings and voltage drop.
- v. Calculation of total electrical connected load and maximum demand.
- vi. Assessment of Sanctioned Load to be enhanced in case of up-gradation projects
- vii. Preparation of cable schedule and sizing of HT/LT Power and control cables, layout of HT/LT and control cables, cable trays, raceways etc.
- viii. Preparing detailed Schematic diagram/ SLD for electrical power distribution.
- ix. Layout of all MV panels and distribution boards / feeder pillars for feeding electrical supply.
- x. Selection of internal light fixtures in consultation with architect for all built-up areas considering illuminations level as per IS code and power provisions as per client's requirements.
- xi. SLD for Lighting, Power, Capacitor Panel and UPS DBs'.
- xii. Meter room layout with meter installation dimensional details.
- xiii. Cable Tray layout with cable loading details of each floor.
- xiv. Services Shaft Locations details of each floor.
- xv. Basement, Ground, common area, all upper floor and terrace – Lighting & Power Layout.
- xvi. Light Fitting schedule, lux level calculation for illumination of the internal and external areas as per NBC and ECBC Codes
- xvii. Selection of external light fixtures along with architect/landscape consultant and interior designer for each identified usage.
- xviii. Preparation of Hume Pipe/ Duct Layout for cables
- xix. Earthing Network, Earth Pit and lightning protection layout.
- xx. Preparation of Tender Documents with Special Conditions of Contract, Technical Specifications, Schedule of Quantities, List of Approved Makes, Tender drawings

(such as individual floor plans of Power, Lighting, UPS, LV Systems, Cable Tray Layouts, earthing network etc). Cost Estimate shall be prepared as per latest CPWD DSR rates for DSR Items and as per Market Rates for Non-DSR Items. Market rates for Non-DSR Items shall be worked out on basis of quotations from vendors and Analysis of Rate as per CPWD norms.

- xxi. Preparation of Tender Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors.
- xxii. Assistance in technical and financial evaluation of bids for finalizing the works to be awarded.

3. Execution Stage:-

- i. Checking the contractor's shop drawing and approval of GFC (Good for Construction) drawings for execution of works at site.
- ii. Preparation of coordinated drawings requiring coordination between civil design features, false ceiling designs, placements of HVAC grills, diffusers, ducts, other HVAC equipment, light fixtures, fans, cable trays, firefighting pipes, sprinklers, fire alarm system and other minor and major equipment.
- iii. Checking Technical Submittal sheets submitted by Contractor & giving observations if any & final approval of the same.
- iv. Visit site as and when required to ascertain that execution of Electrical & LV works at site complies with Technical Specifications and Schedule of Quantities and provide report/ suggestions to HITES for necessary action.
- v. Witnessing Testing & Commissioning process of Electrical & LV works and to ascertain that specified design parameters have been achieved.

i. HVAC System: The scope includes but not limited to:

1. Concept planning & DBR Stage:-

- i. Analyze Client's requirements; develop and verify Concept Design Data

- ii. Preparation of Design Basis Report (DBR) with conceptual design schemes (service room & shaft finalization, plant room demarcation), preliminary SLD (schematic) and preliminary cost estimates.

2. Tender Stage:-

- i. Design of complete HVAC System in accordance with latest NBC/ IS or Local Codes and standards with an aim to achieve minimum required IGBC/ GRIHA/ LEED rating.
- ii. The consultant should provide detailed heat load calculations for summer/ monsoon/ winter for all rooms/areas in which the specified conditions are to be maintained. The consultant shall also plan pressure zoning/ clean class as applicable in various areas. The equipment selection shall be made on the basis of the heat load calculations, pressure zoning and clean class, etc. This should lead to Capital Equipment Selection, i.e., selection of Chillers, Pumps, Cooling Towers, AHU, FCU, Ventilation Fans, Electrical Panels, Air scrubber/Air Washer, VRV Indoor/Outdoor Units etc.
- iii. Preparation of ventilation layout for mechanically ventilated areas like basement, toilets, plant room / kitchen / pantry/laundry etc.
- iv. Preparation of Ducting & Piping Layout for all Air Conditioned Floors.
- v. Preparation of HVAC Schematic layout.
- vi. Preparation of Tender Documents with special condition of contract, schedule of quantities with detailed take off sheets & technical specifications in consideration with CPWD HVAC Specifications & List of Approved Makes.
- vii. Preparation of Tender Estimates based on DSR items & NDSR items (For which rates to be obtained from market). Rate Analysis for NDSR Items to be prepared with supporting quotation from vendors.
- viii. Assistance in technical and financial evaluation of bids for finalizing the works to be awarded.
- ix. Preparation of Tender Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors.

- x. Prior to execution, Agency shall coordinate & provide full support in obtaining Statutory Approval whenever required. Any modification, changes/amendments in drawings in line with requirements of local authority to be done by the agency.

3. Execution Stage:-

- i. Providing HVAC GFC Drawings for all floors (plan/sections etc.) including plant Room.
- ii. Preparation of Coordinated drawings requiring coordination between civil design features, false ceiling designs, placements of HVAC grills, diffusers, ducts, other HVAC equipment, light fixtures, fans, cable trays, firefighting pipes, sprinklers, fire alarm system and other minor and major equipment.
- iii. Checking the Contractor's shop drawing including GA drawings of various equipment & giving observations if any & final approval of the same.
- iv. Checking Technical data sheets submitted by Contractor & giving observations if any & final approval of the same.
- v. Periodic site visits to co-ordinate the works at site.
- vi. Witnessing Testing & Commissioning process of HVAC System.

j. Fire Fighting: The scope includes but not limited to:

1. Concept planning & DBR Stage:-

- i. Analyze Client's requirements; develop and verify Concept Design Data.
- ii. Preparation of Design Basis Report (DBR) with conceptual design schemes (service room & shaft finalization, plant room demarcation), preliminary SLD (schematic) and preliminary cost estimates based on relevant classification of building as per NBC Norms.

2. Tender Stage:-

- i. Design of Fire Protection Systems with underground static & overhead water storage tank requirement as per NBC / Indian Standard Codes /NFPA/ Local Fire

Authority's and standards with an aim to achieve minimum required IGBC/GRIHA/LEED rating.

- ii. The Fire Protection System shall consist of external and internal Hydrant/sprinkler system or water mist system etc. as required for different areas. Hydraulic loss calculation & pump sizing needs to be submitted.
- iii. Preparation of Tender Documents with special condition of contract, schedule of quantities with detailed take off sheets & technical specifications in consideration with CPWD fire fighting Specifications & List of Approved Makes.
- iv. Single Line Diagram showing complete fire protection scheme.
- v. Design and layout of external / internal hydrant/sprinkler/water mist System. Layout of fire extinguishers as per requirements.
- vi. Preparation tender drawings (all floor plans, external layout, terrace plan, plant room layout showing pumps location & connecting pipes & valves).
- vii. Preparation of Tender Estimates based on DSR items & NDSR items (For which rates to be obtained from market). Rate Analysis for NDSR Items to be prepared with supporting quotation from vendors.
- viii. Assistance in technical and financial evaluation of bids for finalizing the works to be awarded.
- ix. Preparation of Tender Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors.
- x. Prior to execution, Agency shall coordinate & provide full support in obtaining Statutory Approval whenever required. Any modification, changes/amendments in drawings in line with requirements of local authority to be done by the agency.

3. Execution Stage:-

- i. Providing Fire fighting GFC Drawings for all floors (plan/sections etc.) including plant Room.
- ii. Preparation of Coordinated drawings requiring coordination between civil design features, false ceiling designs, placements of HVAC grills, diffusers, ducts,

- other HVAC equipment, light fixtures, fans, cable trays, firefighting pipes, sprinklers, fire alarm system and other minor and major equipment.
- iii. Checking the Contractor's shop drawing including GA drawings of various equipment & giving observations if any & final approval of the same.
 - iv. Checking Technical data sheets submitted by Contractor & giving observations if any & final approval of the same.
 - v. Periodic site visits to co-ordinate the works at site.
 - vi. Witnessing Testing & Commissioning process of Fire fighting System.

k. Building Management System:

1. Scope includes but not limited to:-

- i. Operation and control of Air-conditioning equipment like chillers, AHU's, VFD's, VAV's, supply and exhaust fans, cooling towers, pumps, package a/c units etc.
- ii. Integration of lightning and fire detection systems
- iii. Access control, surveillance and other security systems integration.
- iv. Operation and control of electrical systems like lighting control, power monitoring, etc.
- v. Controlling and monitoring water management systems
- vi. Provide consultancy in all aspects of building automation system through all stages:-

2. Concept planning & DBR Stage:-

- i. Analyze Client's requirements; develop and verify Concept Design Data.
- ii. Preparation of Design Basis Report (DBR) with conceptual design schemes and preliminary cost estimates.
- iii. Conceptual arrangement, functions, operations and theme for the smart building services, supported by schematic / riser diagram outlining the IBMS scheme of the project.

3. Tender Stage:-

- i. Design of complete IBMS System in accordance with latest NBC / IS or Local Codes and standards with an aim to achieve minimum required IGBC/GRIHA/LEED rating.
- ii. Prepare design of the Integrated Smart Building Management System Design within alternative solutions using the constraints of the approved architectural and MEP engineering design, identifying advantages and disadvantages of each alternative.
- iii. Ensure coordinated Design Data of all design disciplines fully implementing a low energy design strategy, low maintenance and efficiency in use, together with all verification data
- iv. Develop scheme layouts from the selected option in Concept Design.
- v. Develop internal elevations and establish Special requirements in terms of dimensions and reflected ceiling.
- vi. Floor plans indicating the distribution of the systems.
- vii. Schematic diagrams indicating the networks.
- viii. Preparation of Tender Documents with special condition of contract, schedule of quantities with detailed take off sheets & technical specifications in consideration with CPWD Specifications & List of Approved Makes.
- ix. Preparation of Tender Estimates based on DSR items & NDSR items (For which rates to be obtained from market). Rate Analysis for NDSR Items to be prepared with supporting quotation from vendors.
- x. Assistance in technical and financial evaluation of bids for finalizing the works to be awarded.
- xi. Preparation of Tender Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors.

4. Execution Stage:-

- i. Providing BMS GFC Drawings for all floors (plan/sections etc.) including BMS Room.

- ii. Checking the Contractor's shop drawing including GA drawings of various equipment & giving observations if any & final approval of the same.
- iii. Checking Technical data sheets submitted by Contractor & giving observations if any & final approval of the same.
- iv. Periodic site visits to co-ordinate the works at site.
- v. Witnessing Testing & Commissioning process of BMS System.

l. Hospital Planning: The scope includes but not limited to:

- i. Advise the Architect on planning of clinical areas/ facilities, medical equipment and Integration of medical technology as per MCI and other norms.
- ii. Preparation of the architect's brief as per Client Requirement and applicable norms, including flow and circulation requirements
- iii. Planning of hospital beds & their distribution as per Client's requirement and applicable norms, OPD, IPD, wards, other specialties areas, trauma, labs, OTs, CSSD, waste disposal, canteen, hostels, office quarters and other requirements
- iv. Checking the conceptual and preliminary drawings and layout for functional adequacy
- v. Planning for growth and change
- vi. Advise on HMIS aspects.

m. Hospital Management Information System (HMIS)

- i. Designing HMIS to digitally integrate different wards, clinical areas, pharmacy, billing, HR, purchase, Nurse Call, registration and reception.
- ii. Patient management system. Comprehensive data on disease profile, history, analysis and patient records should be available as required.
- iii. Effective management of available resources

n. Landscape Design:- Scope includes but not limited to:

- i. Open space design
- ii. Design of Landscape structures and features

- iii. Illumination design
- iv. Design of Surface drainage and water management including rainwater harvesting
- v. Signage, graphic design and local architecture elements
- vi. Vehicular and pedestrian movement
- vii. Design of Kiosks and recreations
- viii. Planning of Plants and trees
- ix. Coordination of external services
- x. Methodology for execution and maintenance
- xi. Design of Garden and other green areas

o. Plumbing including Water Treatment Plant/RO/Solar Hot Water System/Sewage Treatment Plant/ Effluent Treatment Plant:-

1. The **scope** includes but not limited to:
 - i. Water supply (cold and hot water) systems and Water distribution through hydro pneumatic variable speed pumping/gravity based system
 - ii. Storm water, sanitary, laboratory waste drainage systems
 - iii. Water treatment plants
 - iv. Sewage treatment/Effluent treatment and pumping systems
 - v. Rain Water harvesting
 - vi. Solar hot water system (active/passive system)
 - vii. Reverse Osmosis Process
2. **Concept planning & DBR Stage:-**
 - i. Analyze Client's requirements; develop and verify Concept Design Data.
 - ii. Calculation of total daily water requirement including flushing/ domestic/ gardening/ filter back wash/ cooling tower make up etc.
 - iii. Preparation of Design Basis Report (DBR) with conceptual design schemes (service room & shaft finalization, plant room demarcation), preliminary SLD (schematic) and preliminary cost estimates.
3. **Tender Stage:-**

- i. Preparation of detailed water balance diagram/sheet showing water requirement, waste water input to STP/ETP, recycled water generated & its usage & further to be supplemented from municipal supply/ bore well.
- ii. Design of Plumbing Systems with underground static & overhead water storage tank requirement as per water requirement.
- iii. Preparation of Tender Documents with special conditions of contract, schedule of quantities with detailed take off sheets & technical specifications in consideration with CPWD fire-fighting Specifications & List of Approved Makes.
- iv. Single Line Diagram showing water treatment scheme.
- v. Design and layout of external / internal plumbing/water treatment/solar hot water/RO System.
- vi. Design of cold water piping, internal waste and sewage piping, internal drain water piping for toilets based on pipe friction loss calculation along with selection of various pumps.
- vii. Preparation tender drawings (all floor plans, external layout, terrace plan, plant room layout showing pumps location, tanks & connecting pipes & valves).
- viii. Preparation of Tender Estimates based on DSR items & NDSR items (For which rates to be obtained from market). Rate Analysis for NDSR Items to be prepared with supporting quotation from vendors.
- ix. Selection of sanitary fixtures and fitting for each individual toilet in coordination with architect.
- x. Preparation of tender drawing for RO/STP/ETP after finalization of scheme & plant room layout.
- xi. Assistance in technical and financial evaluation of bids for finalizing the works to be awarded.
- xii. Preparation of Tender Justification of Rates based on prevailing market rates for all items. Rate Analysis to be prepared with supporting quotation from vendors.
- xiii. Prior to execution, Agency shall coordinate & provide full support in obtaining Statutory Approval whenever required. Any modification, changes/amendments

in drawings in line with requirements of local authority to be done by the agency.

4. Execution Stage:-

- i. Providing Plumbing/WTP/STP/ETP/Solar Hot water/RO GFC Drawings for all floors (plan/sections etc.) including plant Room/Terrace
- ii. Checking the Contractor's shop drawing including GA drawings of various equipment & giving observations if any & final approval of the same.
- iii. Checking Technical data sheets submitted by Contractor & giving observations if any & final approval of the same.
- iv. Periodic site visits to co-ordinate the works at site.
- v. Witnessing Testing & Commissioning process of WTP/RO/Solar Hot water/ STP/ ETP System.

p. Quantity Survey

- i. Calculation/ Derivation of quantity measurements from drawings.
- ii. Cost Estimation using DSR/ SSR/ Market Rates.
- iii. Preparation of BoQ and Technical Specifications
- iv. Should be adept at use of QS software, AutoCAD, etc.

q. CBRN Consultancy

- i. Understanding of CBRN environment and identification of requirement for CBRN detection, protection, decontamination, treatment, analysis and continuous monitoring systems
- ii. Assist in Comprehensive Design Development of the given project including preparation of architectural brief, design concept, concept for services, e.g., air conditioning and air handling systems along with suitable HEPA and CBRN filters, CBRN protection and ventilation systems and their integration with HVAC system (if required), calculation of total rates of water requirement and consequent waste water disposal planning, sewage and waste disposal, treatment and disposal

requirements of chemical/ radioactive/ biomedical wastes, etc., neutralization of contamination, masking, etc., Creation and maintenance of differential pressure in the various modules of the facility under consideration, if required, vehicle decontamination facilities, standby power generating equipment, etc.

- iii. Assist in detailed design engineering, structural, architectural design, electrical engineering, Air-conditioning and Air Handling Systems in CBRN environment
- iv. Proof checking/ Submission of the complete drawings and other related documents, both hard and soft copies in Auto CAD and other software used for the purpose
- v. Project management timelines
- vi. Identifying approvals/ permissions/ permits etc. required from statutory/ local/ Govt. agencies
- vii. All aspects of quality assurance including validation and testing of all equipment during project implementation.
- viii. Advise on provision of equipment including specification and manpower requirement
- ix. Advise on any other systems required for a given project in the CBRN environment

r. Geo Technical Investigation and Topographical Survey

- i. The agency should be capable of carrying out site survey, soil investigations, hydrological investigations, etc. The agency should be able to recommend type of soil stabilization, soil protection systems and type of foundation. The agency should have modern/ latest technologies, software and equipment.
- ii. **Topographical Survey:** The agency should have latest survey equipment and should be able to produce:
 - 1. Preparation of area maps
 - 2. Preparation of Contour maps
 - 3. Construction of Temporary bench marks
- iii. **Geotechnical Investigations:** The agency should be able to carry out necessary geotechnical investigations and suggest sequence of excavation, soil protection systems, type and design of foundations.

- s. Assistance in obtaining statutory approvals and liasioning with local bodies and statutory authorities:** The consultants should be capable of liasing with the municipal/ local and statutory authorities to obtain pre and post construction approvals for construction projects.

10. Eligibility Criteria

a) Technical Expertise

| Category No. | Position | No of staffs (Minimum) | No. of years of experience (Minimum) | Qualification | Specific Expertise |
|--------------|--|------------------------|--------------------------------------|--|---|
| A. | 3D modeling design | Sr. Designer | 5 2 5 2 2 | BFA with specialization in interior design B.Arch Diploma in interior design B. arch with experience in interior design Master of architecture (M. Arch) | <ul style="list-style-type: none"> • Must have experience in original works, alterations and renovations involving partitions, paneling, false ceiling, furniture, work stations etc. |
| | | Draftsman – 1 No | 2 | Diploma/ITI | |
| B. | Town planning/ Urban Planning, Master planning | 5 | 5 | Master of Urban or Regional Planning/ Urban Design/ Town Planning or Planning | <ul style="list-style-type: none"> • Min. 5 yrs experience in urban design/ urban planning of projects involving the arrangement and designing of buildings, public spaces, services and amenities in India. • Must be Familiar with urban development typologies, creation of urban design codes and integration of sustainable design |

| | | | | | | |
|----|-------------------------------|--|-------------------------------------|--|--|---|
| | | | | | | <p>techniques and knowledge of current Indian planning.</p> <ul style="list-style-type: none"> • Shall be a member in Council of Architecture |
| C. | Structural design | <p>Sr. Structural Engineer -1 no</p> <p>Jr. Structural Engineer – 1No</p> <p>Draftsman – 1 No</p> | <p>10</p> <p>3</p> <p>1</p> | <p>ME/ M. Tech (Structural)</p> <p>ME/ M. Tech (Structural)</p> <p>Diploma/ITI</p> | | <ul style="list-style-type: none"> • Experience in the field of designing of Building structure, RCC foundation, Pile foundation and Structural works as per latest BIS Codes. |
| D. | Environment Impact Assessment | <p>EIA Coordinator / Team Leader</p> <p>Environmental Engineer / Planner</p> <p>Social Scientist</p> <p>Hydrologist/ Geologist</p> | <p>1</p> <p>1</p> <p>1</p> <p>1</p> | <p>ME/ M. Tech (Environmental engg/ Environmental Science)</p> <p>ME/ M. Tech (Environmental engg/ Environmental Science)</p> <p>PG in social work/ sociology/ Environmental Economics</p> <p>PG in the relevant field</p> | | <ul style="list-style-type: none"> • Experience in Environmental Impact Analysis with minimum 5 years of experience. • Experience in Environmental Impact Analysis with minimum 5 years of experience. • Experience in public consultation/ social analysis with minimum 5 years of experience • Experience in Ground Water and Watershed Management. Knowledge on interpretation of satellite data and GIS mapping preferred. with minimum 5 years of experience |

| | | | | | |
|----|---|--|--|---|--|
| E. | Quality Assurance/ Quality Control/ Third Party Quality | Team leader Key personnel | 1 3 | PG in Civil Engineering with experience of 5 years as Project head Or Graduate in Civil Engineering with experience of 10 years as Project head Graduate in Civil/ electrical/ mechanical with experience of 5 years | <ul style="list-style-type: none"> • Experience in providing QA/QC/TPI services as per standards/ codes of practice |
| F. | Green building | | | | <ul style="list-style-type: none"> • The consultant shall have a substantial experience in the field of Green Building design, documentation etc. • The consultants shall have worked on at least one certified green building project and shall have at least one ongoing registered project with built-up area more than 1,00,000 Sq. ft. • The consultants shall have at least one LEED AP or IGBC AP or GRIHA TRAINER OR GRIHA EVALUATOR in their team. Equally qualified or experienced person is also eligible (provided shall have an experience of similar nature of work of at least 5 years or shall have minimum 5 registered projects in hand and one completed project). |
| G. | MEP (Comprehensive) | Mechanical Engineer -2 No (Sr. Engr – 1, Jr. Engr – 1) Electrical Engineer – 3No (Sr. Engr – 1, Jr. Engr – 2) | Sr. Engineer - 10 yrs Junior Engr - 5 yrs | BE/ B. Tech (Mechanical) B.Tech (Electrical)/ M. Tech (Power/ Machines) BE/B.Tech (Civil) | Min. 10 yrs experience in planning and designing of MEP works |

| | | | | | |
|----|----------------------------------|--|----------------------|--|---|
| | | Civil Engr – 3 No. (Sr. Engr – 1, Jr. Engr – 2) | | | |
| H. | Electrical & LV Services | Sr. Electrical Engineer – 1No Jr. Electrical Engineer – 1No Draftsman -1 No | 10 5 1 | B.Tech (Electrical)/ M. Tech (Power/ Machines) B.Tech (Electrical) Diploma/ITI | <ul style="list-style-type: none"> • Experience in planning and designing of electrical works including experience in LT/ HT works, transformer, Generator and motors, UPS, etc. |
| I. | HVAC System | Sr. Mechanical Engineer -1 No Junior Engr – 2 nos | 10 5 | BE/ B. Tech (Mechanical/ Refrigeration & Air Conditioning) | <ul style="list-style-type: none"> • Min. 10 yrs experience in planning and designing of HVAC systems in building works |
| J. | Fire Fighting | Engineer- 2 No | 7 5 | B.Tech (Fire & Safety) Diploma in Fire & Safety/ Degree in mechanical engg. With experience in fire engineering | <ul style="list-style-type: none"> • Must have experience in design of fire engineering works |
| K. | Building Management System | Engineer -1 No | 5 | BE/ B.Tech (Electronics/ Computer Science) with experience in BMS | <ul style="list-style-type: none"> • Must have experience in designing of building management system for institutional / business buildings |
| L. | Hospital planning | 1 | 5 | PG diploma / Degree in Hospital Planning & management / MBBS with PG diploma in PHM | <ul style="list-style-type: none"> • Min. 5 years experience in planning of hospitals |

| | | | | | |
|----|---|---|----|--|--|
| M. | Hospital management Information system (HMIS) | 1 | 5 | B.Tech (IT)/ EC/ EE/ MCA/ or B. Tech in any stream with PG in Computer Science / Computer application | <ul style="list-style-type: none"> • Must have experience in managing the administrative, financial and clinical aspects of a hospital. |
| N. | Landscape design | 1 | 5 | Master of Landscape architecture/ Landscape design | <ul style="list-style-type: none"> • Must have experience in landscape design |
| O. | STP/ETP/ WTP | 1 | 10 | B.Tech (Civil/ Mechanical) with Masters in Environmental Engg. | <ul style="list-style-type: none"> • Experience in planning and designing of modern waste water treatment process |
| P. | Quantity surveying | 1 | 10 | BE/B.Tech (Civil) | <ul style="list-style-type: none"> • Must have experience in preparation of estimates, rate analysis, specifications of multi storied institutional buildings |
| Q. | Geo Technical Investigation and Topographical Survey | 2 | 5 | M. Tech/ ME in Geotechnical Engg. | <ul style="list-style-type: none"> • Experience in Geotechnical Survey, modeling and monitoring. |
| R. | Assist in Obtaining Statutory Approvals & Liasoning with Local Bodies | 1 | 5 | Agency/Individual should have working experience of Minimum 5 years in Liasoning with govt. dept./ municipal bodies for getting statutory approval for civil engineering/ infrastructure development work. | |

b) Commercial Expertise

| Class | Consultancy provided No. of Projects/ Works and Value during last five years | Annual Minimum Average Turnover by way of Professional Fees for Past three years ending March 2016 (not applicable for individual consultants) |
|--------------|---|---|
| I. | Atleast one completed Project/ work of value more than Rs.200 Crores. Or Two completed Projects/ works each of value not less than Rs.100 Crores Or Three completed Projects/ works each of value not less than Rs.80 Crores. | 200 Lakhs |
| II. | Atleast one completed Project/work of value more than Rs.100 Crores. Or Two completed Projects/ works each of value not less than Rs.50 Crores Or Three completed Projects/works each of value not less than Rs.40 Crores. | 100 Lakhs |
| III. | Atleast one completed Project/work of value more than Rs.55 Crores. Or Two completed Projects/ works each of value not less than Rs.27.5 Crores Or Three completed Projects/works each of value not less than Rs.22 Crores. | 55 Lakhs |
| IV. | Atleast one completed Project/work of value more than Rs.5 Crores. Or Two completed Projects/works each of value not less than Rs.2.5 Crores Or Three completed Projects/works each value not less than Rs.2 Crores | 5 Lakhs |

- i. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 6.5% per annum; calculated from the date of completion to the last date of receipt of applications for empanelment.
- ii. The empanelment shall be valid for a period of 3 (three) years. The panel may be curtailed/ extended further at the discretion of HITES.
- iii. IIT/NIT/ Govt. Engineering colleges and other reputed private Engineering colleges offering PG courses in the last 10 years is exempted from qualifying based on the above eligibility criteria.
- iv. Applicants who have successfully provided Consultancy Services for Works/ Projects of values mentioned below, during the last 5 years and fulfill specified minimum criteria shall be eligible to apply.
- v. Since the company is in the business of development of Healthcare Infrastructure, experience in Medical Architecture and construction of cGMP/cGLP compliant pharmaceutical manufacturing units and laboratories is desirable.
- vi. Consultant(s)/Firms having experience in designing Green Buildings as per GRIHA norms or equivalent recognized international norms should give details of such works carried out by them in the last five years.
- vii. HITES is committed to provide world Class healthcare and related infrastructure in the country, Engineering Consultants having international experience should highlight this aspect clearly with details and testimonials for such works carried out by them at international level.
- viii. The Application should be on the prescribed form. All Annexure duly completed should be submitted. The Annual turnover of the firm and profit and loss statement by way of Professional Fees for Engineering Consultancy for the last three years, duly audited by a Chartered Accountant, should be submitted. Certified copies of Award letters, completion certificates etc should be enclosed.
- ix. Summary of regular/permanent professional employees and key Personnel including the nature of specialization, qualifications and experience should be enclosed along with certificates.

- x. Applicants should give an undertaking certifying that the firm has not been blacklisted by any Govt./ Local bodies/ PSUs.

11. Instructions to Individual consultants

- a) Eminent technocrats willing to work as Consultant to HITES on per diem basis can apply for empanelment under this EOI in different categories.
- b) They have to submit their credentials in the prescribed format except for the financial parameters. In addition to this, they have to make a presentation before the designated committee of HITES which will form part of this qualification.
- c) Payment for the individual Consultants will be on per diem basis. Net of tax as per the measured duration of work or deliverables as applicable to particular cases.
- d) The RFP for individual consultants will be issued separately.
- e) They will have to enter into agreement with HITES for the successful performance of the assignment given to them.
- f) They should be below 65 years of age.
- g) The role of the consultants will be recommendatory only and the final decision will be taken by HITES.
- h) Necessary working space for the consultant will be provided at the discretion of HITES. No vehicle will be provided for the consultant. However local conveyance for official purpose may be provided at the discretion of HITES.
- i) In case of exigency air travel for senior consultants will be reimbursed at the sole discretion of HITES.
- j) The work of the consultant will be subject to scrutiny by HITES as per terms and conditions of RFP/ agreements.

12. Instructions & Guidelines for Submission of Application Form for Empanelment of Consultants

- a) Empanelment documents shall be downloaded from our website at www.hllhites.com or www.lifecarehll.com or Central Public Procurement Portal.

- b) The consultants already empanelled may also submit their applications afresh.
- c) Application form for empanelment shall be submitted in sealed envelope superscribing "Application for Empanelment of Consultants" (Category to be mentioned), on or before 15.06.2017 at 3.00 pm in the office of AVP (IDD), Golden Jubilee block, HITES, Poojappura, Thiruvananthapuram -695 012.
- d) The application shall be submitted only as per the enclosed format (s) along with Annexure I to XI, Self-attested documentary proof(s) in respect of the details furnished in the application form shall be submitted along with the application. The intending applicants shall also submit the list of such projects where due to any disputes litigation/ arbitration was invoked and/ or the consultancy services were abandoned/ suspended by the consultant(s). Suppression of any information in this regard may lead to cancellation of empanelment of the Firm/ Consultant(s) concerned, if such information comes to the notice of HITES after empanelment. Incomplete applications will be summarily rejected.
- e) The application shall be signed by the Director of the firm or official who has Power of Attorney. All pages of the documents shall be signed/ sealed. ALL PAGES OF EOI DOCUMENT SHALL ALSO BE SIGNED AS A TOKEN OF ACCEPTANCE OF THE CONDITIONS.
- f) In case an application is found suitable for empanelment in class lower than the one applied for, the empanelment may be done in the eligible category in respect of such candidate(s).
- g) An applicant can apply in highest class in more than one category. In such case, the applicant shall submit separate application for each category specifying the Category no. with processing fee for each category.

13. Conflict of Interest:-

- a) HITES requires that consultants should provide professional, objective and impartial advice and at all times hold the client's interest paramount, strictly avoid conflicts with other Assignment/ jobs or their own corporate interests and act without any consideration for future work. The consultant and any of their affiliates shall be

considered to have a conflict of interest and shall not be hired under any of the circumstances given below:

- i. Conflicting activities or assignment i.e. providing goods or works or assignment other than consulting assignment.
 - ii. Conflicting relationship i.e. business/relationship with a member of client's staff involved in the job.
 - iii. The consultants shall be required to observe the highest standard of ethics during rendering of professional services.
- b) Empanelled Engineering Consultants would be entitled to tender for Engineering Consultancy works in HITES and work shall be awarded to successful tenderers on General Terms and Conditions of the bid.
- c) Last date of submission of completed Application form is 15-06-2017 upto 15.00 hours
- d) Incomplete Applications will be summarily rejected. HITES reserves the right to accept or reject any application without assigning any reason.

14. Evaluation Criteria

- a) The applications submitted by the Consultancy firms qualifying the initial criteria shall be evaluated by scoring method as detailed below:

| | | |
|--|----------|------------------|
| Technical Staff Strength (Annexure-I & II) | : | 20 Marks |
| Financial turnover (Annexure- V) | : | 20 Marks |
| Experience of work during last five years (Annexure- III) | : | 25 Marks |
| Current works in hand (Annexure-IV) | : | 15 Marks |
| Award winning project (Annexure - VI) | : | 05 Marks |
| Profile of office automotives (Annexure-X) | : | 05 Marks |
| GREEN building for which GRIHA/International standards rating earned (Annexure-VIII) | : | 05 Marks |
| International Projects done (Annexure - IX) | : | 05 Marks |
| Total | : | 100 Marks |

- b) The marks shall be decided by a duly constituted Committee on the basis of predetermined criteria and where it is not possible to do so, based on their own judgment. The evaluation carried out by the said Committee shall be final and binding.
- c) The above marking criteria is not applicable to individual consultants.
- d) Submission of satisfactory completion certificate from previous clients is essential. Bidders are requested to submit such certificate in their own interest, if possible.
- e) HITES reserves the right to modify the criteria and take own decision if so required.
- f) Only those firms who secure a minimum of 50% marks in each criterion except para e & h of Evaluation Criteria as above and secure overall score of 70% shall be empanelled. However, the parameters shall carry weightage as per Evaluation Criteria above.

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**APPLICATION FORM FOR EMPANELMENT INFORMATION TO BE FURNISHED BY THE
APPLICANTS**

| | | |
|---|---|---|
| Category of work applied for: Empanelment of | | |
| Category– (Please specify category) | | |
| Sl.No. | Particular | Details |
| 1. | Name of Organization | |
| 2. | Address | |
| | Mobile No. | |
| | Telephone No. | |
| | Fax No. | |
| | E-mail ID | |
| 3. | Organization Details | To be filled as per Annexure-I |
| 4. | Details of Directors/ Partners/ Proprietors | To be filled as per Annexure-II |
| 5. | List of Engineering Consultancy Completed | To be filled as per Annexure-III |
| 6. | List of Engineering Consultancy in Progress | To be filled as per Annexure-IV |
| 7. | Financial Status | To be filled as per Annexure-V |
| 8. | List of permanent professional Employees and Key Personnel mentioning their specialization, qualifications, experience and association with the firm | Self-certified copies to be enclosed |
| 9. | List of award winning entries (during last five years) | To be filled as per Annexure-VI |
| 10. | List of consultants associated on regular basis | To be filled as per Annexure-VII |
| 11. | List of works for which GRIHA/International ratings for Green buildings | To be filled as per Annexure-VIII |
| 12. | List of International works | To be filled as per Annexure-IX |
| 13. | List of equipments available with the firm | To be filled as per Annexure-X |
| 14. | Affidavit | To be filled as per Annexure-XI |

Annexure- I

ORGANIZATIONAL DETAILS

| Sl.No. | Parameter | Details |
|---------------|---|--------------------------------------|
| 1. | Organizational Set-up: - Year of Establishment - Status of Firm (Proprietorship/ Partnership/ Any other) - Name of Directors/Partners/Proprietors - Empanelment with Govt. Organizations - (Mention names along with copies of Certificates) | To be filled as per Annexure-II |
| 2. | Staff Strength (as mentioned in Annexure) | |
| 3. | Proof Checking arrangement for Structural design | Details of tie-up if any to be given |
| 4. | Details of Office Automation | |
| 5. | ISO Certification | |
| 6. | Applied for which category | |

**Signature of the applicant
Name & Designation**

Place:

Date:

Annexure-II

DETAILS OF DIRECTORS/ PARTNERS/ PROPRIETORS

| Sl. No. | Name of Partners/Directors/ Proprietors | Academic Qualifications | Designation | Address/ Phone/Fax /e-mail |
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**Signature of the applicant
Name & Designation**

Place:

Date:

Annexure-III

**LIST OF ENGINEERING CONSULTANCY ASSIGNMENTS
COMPLETED IN LAST 5 YEARS**

| Sl. No | Name of Work / Project with address | Short Description of Eng. Consultancy assignment | Name and address of Owner/ Client | Value of Work/ Project | Date of Start of Work/ Project | | Date of Completion of Work/ Project | | Bonus/ Liquidated Damages if any imposed on consultant | Agreement details with copy attached. |
|--------|-------------------------------------|--|-----------------------------------|------------------------|--------------------------------|--------|-------------------------------------|--------|--|---------------------------------------|
| | | | | | Stipulated | Actual | Stipulated | Actual | | |
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Note:

The list of Works/Project mentioned should be substantiated with documentary evidence such as work orders and completion certificates in the absence of which the application is liable to be rejected.

Signature of the applicant

Annexure-IV

LIST OF MAJOR ENGINEERING CONSULTANCY PROJECTS/ ASSIGNMENTS IN PROGRESS

| Sl. No | Name of Work/ Project in Progress with Address | Short description of Consultancy work done by the firm | Name and addresses of Owner | Value of Work/ Project executed | Date of Start of Work/ Project | Stipulated Time of Completion | Status of work | Expected Date of completion | Any other relevant information |
|--------|--|--|-----------------------------|---------------------------------|--------------------------------|-------------------------------|----------------|-----------------------------|--------------------------------|
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Note:

The list of Works/Project mentioned should be substantiated with documentary evidence such as work orders etc. in the absence of which the application is liable to be rejected.

Signature of the applicant

Annexure-V

FINANCIAL STATUS

| Sl. No. | Financial year | Turnover (in Rs.Lacs) from Consultancy | Profit/ loss (-) |
|---------|----------------|--|------------------|
| 1. | 2013-2014 | | |
| 2. | 2014-2015 | | |
| 3. | 2015-2016 | | |

Note:

Certified copies of audited Balance Sheets/ Chartered Accountants Certificates to be enclosed.

Place:

Date:

NOTE

The class limits for minimum annual average turnover is shown in page 10. Minimum average annual turnover for Consultancy should not be less than 0.5% of the minimum class limit for Structural consultants and 0.25% of the minimum limit for other classes for 50% marks. Twice the value or more will fetch 100% marks and the marks for lower values will be reduced prorata linearly.

Annexure-VI

LIST OF AWARD WINNING ENTRIES (DURING LAST FIVE YEARS)

| S. No | Name of Client Department | Name of Project | Covered Area | Cost of Work | Detail of the Project (Salient Feature of the Project) | Stage of the Project | Institution & Nature of Award |
|-------|---------------------------|-----------------|--------------|--------------|--|----------------------|-------------------------------|
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**Signature of the applicant
Name & Designation**

Place: Date:

NOTE

Minimum one project will fetch 5 marks

Annexure-VII

ASSOCIATED CONSULTANTS

| Sl. No. | Nature of Consultancy | Name & Address of Consultants | Name, Qualification & Experience of Staff | Important Projects Handled |
|---------|-------------------------------|-------------------------------|---|----------------------------|
| 1 | Structural Consultant | | | |
| 2 | Service Consultant | | | |
| | (a) For Civil Services | | | |
| | (b) For Electrical Services | | | |
| | (c) Fire Engineering Services | | | |
| | (d) HVAC Services | | | |
| 3 | Landscape Consultants | | | |
| 4 | QS Consultants | | | |
| 5 | Green Building Consultant | | | |
| 6 | QA/ QC | | | |
| 7 | Geotechnical Consultant | | | |
| 8 | Anyother Consultant | | | |

Place: Date:

**Signature of the applicant
Name & Designation**

**Minimum number will fetch 50% marks.
The marks will vary prorata.**

Annexure-VIII

**LIST OF WORKS FOR WHICH GRIHA/IGBC/OTHER
INTERNATIONAL RATINGS FOR
GREEN BUILDINGS EARNED**

| S. No | Name of Client | Name of Project | Covered Area | Cost of Work | Detail of the Project (Salient Feature of the Project) | Rating Earned |
|------------------|---------------------------|----------------------------|-------------------------|-------------------------|---|--------------------------|
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**Signature of the applicant
Name & Designation**

Place: Date:

NOTE

One certified project will fetch 5 marks.

Annexure-IX

LIST OF INTERNATIONAL WORKS

| S. No. | Name of Client | Name of Project | Covered Area | Cost of Work | Detail of the Project (Salient Feature of the Project) | Stage of the Project |
|---------------|-----------------------|------------------------|---------------------|---------------------|---|-----------------------------|
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Signatureoftheapplicant

Place: Date:

**Signature of Applicant
Name & Designation**

NOTE

Minimum one International project will fetch 5 Marks.

Annexure-X

LIST OF EQUIPMENTS AVAILABLE WITH THE FIRM

| S. No. | Name of Equipment | Type | Nos. |
|--------|-----------------------|------|------|
| 1 | Computers | | |
| 2 | Printers | | |
| 3 | Plotters | | |
| 4 | Softwares | | |
| 5 | Office Space (in Sqm) | | |

**Signature of the applicant
Name & Designation**

Place:

Date:

Annexure-XI

AFFIDAVIT

(TO BE SUBMITTED ON NON-JUDICIAL STAMP PAPER OF MINIMUM Rs.10/- DULY CERTIFIED BY NOTARY PUBLIC)

Affidavit of Mr..... S/o R/o

The deponent above named to hereby solemnly affirm and declare as under:

1. That I am the Proprietor/Authorized signatory of M/s.....having its Head Office/ Regd. Office at.....
2. That the information/ documents/ Experience certificate submitted by M/s along with this 'EMPANELMENT OF CONSULTANTS to HITES are genuine and nothing has been concealed.
3. I shall have no objection in case HITES Verifies them from issuing authority (ies). I shall also have no objection in providing the original copy of the document(s), in case HITES demands for verification.
4. I hereby confirm that in case, any document, information &/or certificate submitted by me found to be incorrect/false/ fabricated, HITES at its discretion may disqualify/reject my application for pre-qualification out rightly and also debar me/ M/s..... from participating in any future tenders/ PQ.

Deponent

I,....., the Proprietor/ Authorized signatory of M/s.....,do hereby confirm that the contents of the above Affidavit are true to my knowledge and nothing has been concealed therefrom and that no part of it is false.

Verified at.....this.....day of.....

Deponent