PUBLIC WORKS DEPARTMENT  
(Govt. of N.C.T. of Delhi)

TECHNICAL BID DOCUMENT

Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of School buildings under PWD, GNCT Delhi.

Executive Engineer,
Building Project Division M-331,
PWD, GNCTD, Dr. B.S.A. Hospital Campus,
Sector-6, Rohini, Delhi-110085.
TENDER DOCUMENT

N.I.T. FOR THE WORK:-

Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of School buildings under PWD, GNCT Delhi.

NIT NO:- 34/EE/M-331/2015-16

Issued to

M/s. ..............................................................
 ........................................................................
 ........................................................................
  on ..............................................................

To be received up to 1500 Hrs on 03-08-2015

Executive Engineer
CBMD M-331, PWD,
Dr. B.S.A. Hospital
Campus, Sector-6, Rohini,
Delhi-110085
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DATA SHEET

1. Name of work: **Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of School buildings under PWD, GNCT Delhi.**

2. The Name & Address of the Client:

3. Engineer-in-Charge: Executive Engineer
   CBMD M-331, PWD,
   Dr. B.S.A. Hospital Campus,
   Sector-6, Rohini, Delhi-110085

4. Department: **Public Works Department,**
   Govt. of National Capital Territory,
   Delhi unless otherwise specifically mentioned.

5. The Documents are:
   - Terms of Reference (TOR): Annexure A
   - Technical Bid
   - Formats for Technical Proposal: Annexure B
   - Form of Agreement: Annexure C
   - General Condition of Contract: Annexure D

6. Tax liability: No Tax, Cess, and Levy except Services Tax shall be paid to the consultants over their contract amount. In respect of service tax, same shall be paid by the consultant to the concerned department on demand and it will be reimbursed to him by the Engineer-in-Charge after satisfying that it has been actually and genuinely paid by the consultant. Recoveries for Income Tax, education Cess or any other taxes as per prevailing statutory requirements shall be made from the payments made periodically to the consultants.

7. Date of sale of Technical Proposal: 27.07.2015 upto 3:00 pm.

8. The date and time of proposal submission (see para 3.1): 03.08.2015 upto 3:00 pm.

9. Date of Opening of Technical Bid: 03.08.2015 upto 3:30 pm.

   ....*.... To be filled by EE
10. **EMD**: An EMD of Rs. 50,000.00 (Rupees Fifty Thousand only) in the form of receipt treasury challan/ deposit at call receipt of a scheduled bank/ fixed deposit receipt of scheduled bank/ demand draft of scheduled bank drawn in favour of Executive Engineer, M-331, PWD, Delhi and payable at New Delhi, must be submitted along-with the bid document. No other mode / form of payment shall be acceptable.

11. **Prebid meeting (para 1.5)** Date 30.07.2015 at 3.00 P.M. in the chamber of CE, MZ-3, PWD, 5th Floor, MSO Building, I.P. Estate, New Delhi-110002.


Executive Engineer
M-331, PWD, GNCTD

Superintending Engineer
CBMC M-33, PWD, GNCTD

Assistant Engineer (P)
PWD, MZ-3

Executive Engineer(P)
PWD, MZ-3

Technical and Financial Bid documents are approved.

Chief Engineer
MZ-3, PWD, GNCTD
MSO Building, I.P. Estate,
New Delhi-110002.
PRESS NOTICE

The Executive Engineer, Division M-331, PWD, Dr. B.S.A. Hospital Campus, Rohini, Sector-6, Delhi-85 on behalf of the President of India, invites tenders in two Bid system from the reputed Consultants / Architectural agencies/firms for the following work:-

Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction School buildings under PWD, GNCT Delhi.

The Earnest Money : Rs. 50,000/-

Last Date of Receipt of Application through e-mail on ID no. eepwddelhim331@gmail.com or in person: 27.07.2015

Last Date of Issue of Tender in PDF through e-mail or in person: 28.07.2015

Date, time and place of pre-bid meeting: 30.07.2015 at 3.00 PM in the chamber of CE, MZ-3, 5th floor, MSO Building, I.P. Estate, New Delhi-02.

The Date of Opening Technical Bids: 03.08.2015

The tender document along with all terms and condition is available on Govt. of Delhi web site https://govtprocurement.delhi.gov.in. The intending bidders may download tender document from the website or may collect physically from the office of Executive Engineer, M-331, PWD, (GNCTD), Dr. B.S.A. Hospital Campus, Rohini, Sector-6, Delhi-110085.

Not to be published.

Executive Engineer
M-331, PWD,
Dr. B.S.A. Hospital Campus,
Rohini Sector-6,
Delhi-110085.
INVITATION OF BIDS

The Executive Engineer, Division M-331, PWD, GNCTD, Dr. B.S.A. Hospital Campus, Rohini, Sector-6, Delhi-110085, on behalf of the President of India, invites in two Bid system from the reputed Consultants / Architectural agencies/firms for the following work:-

Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of School buildings under PWD, GNCT Delhi.

1.0 Brief details of projects:-

GNCT Delhi has planned to construct in next 4 years a number (around 500) of School buildings in Delhi. Apart from it some new blocks of permanent/semi permanent buildings are to be added in the existing buildings. For this purpose, GNCT Delhi intend to prepare a panel of consultants.

1.1 Eligibility Criteria:-

- Consultants / Architectural firms should have minimum 5 years of experience.
  - Any firm/consultant (whether titled as an Architectural firm or an Engineering firm, which fulfills the laid down eligibility criteria defined herein shall be permitted to take part in the bidding process.
  - Engineering firms shall be permitted to engage Architects registered with Council of Architect and with requisite experience to fulfill eligibility criteria and to take part in the bidding process. Likewise Architectural firms shall be permitted to engage Engineers of appropriate qualification and experience to fulfill eligibility criteria and to take part in the bidding process.
  - Consultants / firms shall be allowed to engage / associate sub consultant, whose credentials, manpower, experience details shall be given along with the bid. the Sub-consultant shall be entitled to get experience certificate from PWD for the work rendered by them in their own capacity through the main consultant.

- The bidder should have had average annual financial turn over (gross) of Rs.50.00 lacs on consultancy work during the last available five consecutive balance sheets (may range from six to eighteen months) duly audited by Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.

- The bidder should not have incurred any loss in more than two years during available last 05 (Five) consecutive balance sheets, duly certified and audited by the Chartered Accountant.

- Should have satisfactorily completed consultancy work of 3 similar projects each costing not less than Rs. 10.00 Crores or two similar projects each costing not less than Rs. 15 Crores or One similar projects costing not less than Rs. 20 Crores during last Seven years ending up to 30.06.2015 (The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per Annum, calculated from the date of completion to the last date of submission of bid).

Or

Should have satisfactorily completed 3 similar work projects each having not less than 3500 sqm built up area or two similar projects each having not less than 5500 sqm built up area or one similar project having not less than 7000 sqm built up area, during last Seven years ending up to 30.06.2015.
• Similar projects means R.C.C. framed educational building such as University College, School etc. with or without basement

1.2 To facilitate the preparation of bid, the following documents are enclosed.
   i. Terms of Reference (TOR) - Annexure-A
   ii. Format for technical proposal - Annexure-B
   iii. Form of agreement - Annexure-C
   iv. General conditions of contract - Annexure-D

1.3 Information to be furnished by the bidder:
   i. Work experience, financial turnover and other details.
   ii. Composition of the team personnel, their CV and the task which would be assigned to each team member, details of key personnel & manpower deployment schedule.
   iii. Actual design/detail of anyone major educational project executed by the bidder.
   iv. Approach paper on methodology proposed for performing the assignment.

1.4 In order to obtain first hand information about the assignment, the local conditions/constraints and the concept of the project considered, it is essential that the consultant apprises himself with the site conditions local bye-laws and all other relevant information.

1.5 A pre-bid meeting shall be held on (as per Data Sheet Para 11) in the Chamber of Chief Engineer, MZ-3, PWD, 5th Floor, MSO Building, New Delhi for clarifications, if any, in the documents.

1.6 At any time before the submission of proposals, the Department may, for any reason, whether at its own initiative or in response to a clarification requested by an invited bidding firm, modify the Documents by suitable amendment. The amendment shall be sent in writing or by facsimile/e-mail to all the firms invited to submit proposal and will be binding on them. The Department may at its discretion extend the deadline for the submission of proposals.

2.0 BID DETAILS

2.1 The bid shall be submitted in the prescribed documents.

2.2 The technical proposal furnished by the consultant should duly consider the provisions of the TOR and if in the view of the consultant, any further activity/activities are needed, which are essential for accomplishment of the job, the same should also be considered in the technical proposal. Nothing extra will be paid on this account.

2.3 The proposal shall be valid for a period of around 2 Years (See Data Sheet Para 12). The period of validity of the proposal shall be reckoned from date of opening of Technical bid and during this period, no change in the quoted price is permissible. No change of personnel proposed to be engaged as per the technical proposal shall be permitted without prior consent of the Department for the entire period of consultancy job.

2.4 Earnest Money Deposit (EMD)

2.4.1 An EMD of Rs. 50,000/- (Rupees Fifty thousand only) in the form of receipt treasury challan / deposit at call receipt of a scheduled bank / fixed deposit receipt of scheduled bank/ demand draft of scheduled bank drawn in favour of Executive Engineer, M-331, PWD, Delhi and payable at New Delhi, must be submitted along-with the bid document. A part of earnest money is acceptable in the form of bank guarantee also. In such case 50% of earnest money or Rs. 20 Lakh, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee. No other mode / form of payment shall be acceptable.

2.4.2 No interest shall be payable by the department for the earnest money deposit.

2.4.3 The EMD shall be forfeited by the department in the following events:

2.4.3.1 If the proposal is withdrawn during the validity period or during the extension agreed by the consultant thereof.
2.4.3.2 If the Proposal is varied or modified in a manner not acceptable to the department after opening of Proposal during the validity period or any extension thereof.

2.4.3.3 If the Consultant tries to influence the evaluation process.

3.0 SUBMISSION OF BIDS

3.1 Technical bid (Two copies) & Earnest money should be submitted in two separate sealed envelopes supercribed as “Technical bid”, and “Earnest money” respectively. These two envelopes should be placed in one sealed envelope.

Completed proposal should be delivered to Executive Engineer, M-331, PWD, Delhi by 3.00 P.M. on (see data sheet para 8). Any proposal delivered after the above-mentioned due date and time will not be considered. The technical bids will be opened in the presence of intending bidders/their representative on the day and time to be intimated separately.

It shall be the responsibility of the bidder to ensure that the bid is submitted in proper and sealed envelopes. The Technical Bid, without the prescribed EMD will not be opened and is liable for rejection.

3.2 Technical Proposal

3.2.1 The technical bid to be submitted as per format of Annexure-B shall comprise the following:

(i) Letter of transmittal – Annexure B-1
(ii) Details of registration / Turnover / work experience of the firms. – (Annexure B-2, B-3 and B-4).
(iii) Composition of technical/managerial staff, their CV and task assigned to them. (Annexure B-5, B-6 and B-7).
(iv) Approach paper on the methodology proposed for performing the assignment demonstrating the bidder’s knowledge of the project requirements and bidder’s understanding of the requisite tasks as set forth in the scope of services (Annexure B-8)
(v) Actual design/detail of anyone major project executed by the bidder.

3.2.2 Each CV shall be signed in blue ink by the key personnel and countersigned by the authorized officials of the Firm. Photocopy or unsigned / uncountersigned CVs shall be rejected. Digitalized signatures/ scanned copy of the signatures on CVs of the key personnel duly countersigned by authorized signatory of the lead consultant shall also be acceptable.

3.2.3 Each CV shall contain the proof of age and qualification as well as an undertaking from the key personnel about his availability for the duration prescribed in the NIT.

3.2.4 The key personnel proposed should not have attained the age of 70 years at the time of submitting the proposal.

3.2.5 The personnels proposed should possess good working knowledge of English Language.

3.2.6 At least 25% of the personnels proposed for the project should be under employment with firm(s) on the date of submission of the proposal. Necessary proof in this connection shall be submitted.

3.2.7 In case a firm is proposing key personnel from educational / research institutions, a ‘No Objection Certificate’ from the concerned institution shall be enclosed with his CV.

3.2.8 The actual design/detail of anyone major educational project shall include functional layout plan, conceptual drawings structural concept, utility services concept, finishing, air conditioning details if any. The details to be provided by the applicant should be adequate to understand the entire scheme. The breakup of
cost of different component of project along with unit area cost and cost per student shall also be provided. Size of drawings shall be minimum A-1. The bidders shall be required to make presentations of 30 to 40 minutes duration duly supported by computer presentation to the evaluation committee as and when called for, showing the salient features of the project.

3.2.9 After award of contract the Client expects all of the proposed key personnel to be available during implementation of the contract. The Department will not consider substitutions during contract implementation except under exceptional circumstances up to a maximum of 25 percent of key personnel (considering equal weightage for each key personnel) and that too by only equally or better qualified and experienced personnel.

3.2.10 The consultant has also to associate a proof consultant for independent checking of the structural design prepared by the consultant, for which NO extra payment shall be made by the department. The proof consultant shall be among IIT, DTU, NIT or any reputed Institute to be got approved from the Chief Engineer, MZ-3, PWD, GNCT of Delhi.

4.0 EVALUATION OF BIDS
The technical proposal will be evaluated and marks assigned as per the marking criteria elaborated in the subsequent para.

4.1 Evaluation of Technical proposal:-
The Board of Assessors duly constituted by the competent authority shall evaluate the technical offers based on following criteria and select best proposals as deemed fit by it.

(i) Work experience / experience of key personnel/Turnover etc. - 60 Marks
(ii) Appraisal of already executed project, methodology of planning and execution of the work and concept of the proposal - 40 Marks
(Evaluation of part (ii) shall be done by the Board of Assessors.)

Total 100 Marks

The evaluation of bids will be based on the following details:-
MARKING CRITERIA

(I) Work experience /experience of key personnel/Turnover etc.

For work Experience

(A) The total value of similar works completed during the last 7 years ending last day of the month previous to the one which Quotations are invited. The value of three similar works completed having highest amount shall be considered and the marking criteria shall be as under:-

(a) Experience in similar class of works = (i) 60% marks for minimum eligibility criteria
   (ii) 100% marks for twice the minimum eligibility criteria or more
   In between (i) & (ii) – on pro-rata basis

The maximum marks in the category are 20.
The firm shall have to submit photographs of projects completed along with other relevant documentary evidence.

(B) For Technical Staff

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Field of Specialization</th>
<th>Desired No.</th>
<th>Max. Marks (Experience)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lead Architect</td>
<td>1</td>
<td>4.00 marks (minimum experience of 10 years)</td>
</tr>
<tr>
<td>2</td>
<td>Architect</td>
<td>2</td>
<td>4.00 marks (2.00 marks each) (minimum experience of 8 years)</td>
</tr>
<tr>
<td>3</td>
<td>Structural Engineer*</td>
<td>1</td>
<td>4.00 marks (minimum experience of 8 years)</td>
</tr>
<tr>
<td>4</td>
<td>Electrical Engineer</td>
<td>1</td>
<td>2.00 marks (minimum experience of 8 years)</td>
</tr>
<tr>
<td>5</td>
<td>Fire Fighting</td>
<td>1</td>
<td>1.00 marks (minimum experience of 10 years)</td>
</tr>
<tr>
<td>6</td>
<td>Water Supply and Sanitary Expert</td>
<td>1</td>
<td>1.00 marks (minimum experience of 8 years)</td>
</tr>
<tr>
<td>7</td>
<td>School Consultant</td>
<td>1</td>
<td>1.00 marks (minimum experience of 5 years)</td>
</tr>
<tr>
<td>8</td>
<td>Landscape/ Horticulture</td>
<td>1</td>
<td>1.00 marks (minimum experience of 5 years)</td>
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<tr>
<td>9</td>
<td>Green Building Consultant</td>
<td>1</td>
<td>1.00 marks (minimum experience of 5 years)</td>
</tr>
<tr>
<td>10</td>
<td>Autocad/Revit certified D’Man</td>
<td>2</td>
<td>1.00 marks (minimum experience of 2 years)</td>
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<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>20.00</strong></td>
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</tbody>
</table>

The maximum marks in the category are 20.00
(C) For average financial turnover for the last 5 years.
(Total receipts for consultancy jobs only will be counted) = (i) 60% marks for minimum eligibility criteria.
(ii) 100% marks for twice the minimum eligibility criteria or more.
In between (i) & (ii) – on pro-rata basis

Maximum marks in this category are 15.

(D) For quality works (Awards & Appreciation)
(a) For international/ National awards = 3 Marks
(b) For other awards/ appreciations by Govt./ Public Undertaking/crowned bodies = 2 Marks

The maximum marks in this category are 5

(II) Appraisal of already executed project, methodology of planning and execution of the work and concept of the proposal
(To be assessed by Board of Assessors)

Note :- If required Board of Assessors may inspect the site to verify the project details submitted by the consultant.

To sum up following is the criterion for evaluation of ‘Technical Bid’:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Criteria</th>
<th>Maximum Marks</th>
<th>FORM to be submitted</th>
</tr>
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<tbody>
<tr>
<td>I</td>
<td>Work experience /experience of key personnel/Turnover etc.</td>
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</tr>
<tr>
<td>a.</td>
<td>Experience in similar works</td>
<td>20</td>
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<td>b.</td>
<td>Experience of key personnel and to be employee</td>
<td>20</td>
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<td>c.</td>
<td>Turn over</td>
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</tr>
<tr>
<td>d.</td>
<td>Award &amp; Appreciation</td>
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<tr>
<td>II</td>
<td>Presentation /Interview</td>
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<tr>
<td>a.</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>A. Approach to methodology and planning</td>
<td>20</td>
<td>Annexure B-8</td>
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<td></td>
<td>B. Green building measures</td>
<td>5</td>
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<td></td>
<td>C. Innovative material &amp; technology</td>
<td>5</td>
<td></td>
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<tr>
<td></td>
<td>D. Efficiency of space utilization</td>
<td>10</td>
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</table>

(b) Appraisal of already executed project, methodology of planning & execution of work and concept of the proposal -
The bidder shall critically examine the total scope of work and furnish their comments. The appraisal of the scheme shall be as per the (Format B.8). The conceptual scheme shall show the general layout of all proposed buildings, internal roads, and utility services, supporting facilities e.g. Air-conditioning if any etc., structural concept and other details adequate to understand the whole scheme. The conceptual scheme shall be prepared as elaborated under clause 3.2.8.
4.2 **Evaluation of Proposal:-**

For qualifying the technical bids, the bidder shall have to secure minimum 50% marks in each of the above two groups (i) & (ii) under Clause 4.1 and 60% marks overall.

4.2.1 Panel of consultant shall be framed based on Technical Bids only. Financial Bids shall be invited separately for individual project from the panel.

4.2.2 The department is not bound to empanel all such bidders and reserve the right to amend selection process and also to restrict the number of empanelled consultants. The panel of consultant shall remain valid for **2 years** from the date of its formation.

5.0 **PRE-BID CONFERENCE**

Pre-bid conference shall be held in the office of **Chief Engineer MZ-3, Fifth Floor, MSO Building, I P Estate New Delhi-02** on (See data sheet para 11) for answering any queries/clarifications of prospective bidders regarding the bid.
Annexure-A

TERMS OF REFERENCE

1.0 SALIENT FEATURES OF THE WORK

Name of work:- Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of school buildings under PWD, GNCT Delhi.

The empanelment of consultant is for consultancy services required for various upcoming school building projects under PWD, GNCTD.

2.0 ROLE OF THE CONSULTANT

(i) The Role of the Consultant is to provide Comprehensive Consultancy Services for upcoming project allotted to him in future and shall be involved right through the entire duration of the project till commissioning / handing over of the respective buildings /facilities.

The consultant shall provide comprehensive consultancy services in upcoming project conceptualization covering space utilization, functional requirements, preparation of Master Plan/, Preliminary Project Report Project cost estimation, Detailed Architectural, Engineering and services design, Detailed Project Report, Preparation of contract Documents, Facilitation, Design & Specifications Assistance and Computer Based Energy Analysis of the Building and its components and documentation for GRIHA Rating while collaborating with the Design team to create the most sustainable design output and the best possible green certification (not less than three star green certification) for the project which has to be registered in ADARSH (Association for Development and Research, Sustainable, Habitat).Preparation of 3 D virtual construction model of buildings and services for Engineering coordination among architectural and other designs (structural and MEPF services like electrical, mechanical, plumbing and fire protection etc.) etc. The Preliminary project report shall cover all project components.

(ii) The consultant shall prepare/ modify the master plan including existing buildings and services if any of whole campus.

(iii) The consultant shall take all necessary statutory approval from all authorities including DUAC, NDMC, Jal Board Delhi, Pollution Control Board, Delhi Fire Services, M.C.D./DDA, M.O.E.F., C.G.W.A., Airport Authority etc. Preparation of all submission drawings / materials and models for these approvals will be responsibility of the consultant. The statutory approvals shall include completion certificate for the completed building from the local bodies.

(iv) All Environmental Impact Assessment, as required has to be done by the consultant.

(v) The consultant shall have constant and regular interaction with the PWD, client and structural / services proof consultants for formulating the design philosophy and parameters, preparation of preliminary designs/ drawings/ Specifications.

(vi) The consultant shall have to carry out topographical survey and the survey of all existing services and other constraints existing in and around the site for augmentation of existing services/ facilities as per site requirement.
(vii) The consultant shall also prepare the bid documents for call of tenders for execution of work in suitable packages. The Detailed Estimate showing details of measurement, BOQ, draft tender document, analysis of rates etc. shall be prepared and submitted by the consultant to the concerned EE, M-331, PWD for formal approval. The corrections / observations, if any is made by the department, the same shall be complied by consultant till final approval by the competent authority. The approved tender documents shall also be submitted in requisite numbers.

(viii) The Consultant shall have to perform in an efficient, orderly and professional manner and shall deploy necessary qualified and skilled persons according to the requirement of the services.

(ix) The Consultant and the Sub-Consultants shall visit the works during execution stage to ensure that the works are being executed as per approved scheme and render appropriate advice and carry out all site related modifications in the designs and drawings.

(x) The consultant shall have to assist Engineer-in-charge in preparing presentations and presentation materials.

(xi) The consultant shall have to submit an Inception Plan within 7 days of award of work outlining the total scope of work to enable Engineer-in-charge to fix the milestones as well as to work out the implementation strategy for the whole Project.

(xii) The consultant shall have to prepare design philosophy and the design methodology, listing out relevant codes, related references, sound-engineering practices etc.

(xiii) The consultant shall have to get the structural analysis and structural design checked by the proof consultant. The detailed design notes shall be submitted along with design philosophy to Engineer-in-Charge. Proof consultant shall have to get appointed by the Govt./ Department for which no fee shall be borne by the Govt./ Department.

(xiv) The Consultant shall comply with all applicable laws, bye-laws, and statutory provisions etc. in the performance of the consultancy assignment and in the execution of the project.

(xv) The consultancy services shall be provided through a Team Leader supported by experienced professionals. The Consultant will deploy adequate number of professionals and other staff to deliver the requisite services. The Consultant shall have to submit an Organogram giving details of proposed Team detailing the roles/work to be performed by each personnel, their tentative duration, inter-relationships of each personnel etc.

(xvi) IT connectivity shall be provided between the Project Consultant's office and the Engineer-in-charge / his representative at New Delhi during the entire period of the Consultancy assignment.

(xvii) The Consultant shall get the approval of the Department /client or both through presentations, physical models, computer walk-through etc. Comments and suggestions or alternate proposal of the client and his representatives shall be evaluated and suitably incorporated till the concept design is accepted and frozen.

(xviii) The Consultant shall develop the concept drawings for each of the building for submission to all the statutory authorities/bodies, incorporate changes, if suggested by the statutory authorities / bodies and obtain approvals from all regulatory authorities.

(xix) The Consultant shall 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.

(xx) The Consultant shall 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. He shall also 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.
For facilitation, Design & Specifications Assistance and Computer Based Energy Analysis of the Building and its components and documentation for GRIHA Rating, the consultant shall be required to do:

   (i) Solar Analysis for optimizing orientation, shading, and glazing areas
   (ii) Detailed whole building Thermal/Energy Simulation to achieve thermal comfort indoors through detailed analysis of the following:
       (a) Envelope (Wall, Windows, Skylights etc).
       (b) Passive cooling system.
       (c) HVAC systems and components (if required) together with passive cooling strategies.

   (iii) Perform the following GRIHA Green Certification related analysis:
       (a) Analysis for Minimum Energy performance Pre-requisite.
       (b) Analysis for optimizing building design to reduce conventional energy demand.
       (c) Energy Simulation and Analysis for Optimum Energy Performance of building within specified comfort limits.
       (d) Energy Use Calculation for Renewable Energy Credits.

(B) Building Analysis for Day lighting and Artificial Lighting
   (i) Day lighting Simulation for optimizing natural lighting.
   (ii) Luminance Analysis
       (iv) Perform the GRIHA Green Certification related analysis for lighting

(C) Site Planning & Water Management
   (i) Design and recommendation for Erosion control & sedimentation control on site.
   (ii) Assist on Low water usage, Rainwater Harvesting, Wastewater recycling and construction waste usage and other waste management strategies.

   (iii) Transportation Management Strategies
   (iv) Perform the GRIHA Green Certification related analysis.

(D) Working with design team to achieve GRIHA rating
   (i) Overall facilitation to obtain not less than 3 star GRIHA rating from TERI under their GRIHA program.
   (ii) Awareness on Green Building concepts and GRIHA rating system for the project team.
   (iii) Facilitate the project design team to select materials/equipment to meet the GRIHA requirement. Support in identifying vendors for the project to meet GRIHA requirement.
   (iv) Vet the tender document to ensure the tender technical specification meets the GRIHA requirements.
   (v) Create a Construction Documents Review Report.
   (vi) Prepare and provide all necessary templates for the design team, so as to meet GRIHA requirements.
   (vii) Facilitate project team in preparing the documentation as stipulated by GRIHA and its submission for getting GRIHA Rating. Filter, cross validate, verify consistency, add value and consolidate to make the document suitable for submission to TERI. Provide inputs on previous credit interpretation requests.
(viii) Besides taking up his own documentation, the consultant must also take up all the
documentation for all the points as required from the sides of the architect,
project managers including taking periodic photographs. Cad drawings & putting
together product cut sheets & statements. Only raw material like product
brochures for this would be supplied through a designated point person from the
department.

(E) Measurement and Verification (through a BEE accredited auditor)

(i) Prepare a Measurement & Verification Plan based on building systems selected for
implementation.

(ii) Occupation. Provide functional testing of operation strategies (day lighting, occupancy
control, Indoor Air Quality) with short term monitoring.

(iii) Create Verification Report as per the above.

(iv) Calibrate the computer model of the site and building situation as built to create a
model of the actual savings.

(F) Details of “Factors to be Considered” for the “Experience in sustainable design &
green building” Parameter

(i) Either walls or roofs having efficient ‘U’ factor as specified in ECBC (Energy
Conservation Building Codes)

(ii) Vertical fenestration complying with ECBC requirements as specified in ECBC.

(iii) Use of energy simulation program for building design (Provide brief description and
simulation results)

(iv) Use of passive and low energy cooling of buildings.

(v) Integration of on-site renewable electricity generation e.g. solar photovoltaic,
biomass gasifier, etc.

(vi) Extensive use of low embodied energy building materials.

(vii) Energy efficient HVAC system as specified in ECBC if required.

(viii) Implementation of building automation system: timer based controls, motion sensors,
etc. as required.

(ix) Integration of on-site renewable based thermal energy e.g. solar hot water, etc. as
required.

(xxii) Preparation of 3D virtual model shall include following:

a) Coordination among the architectural, services and structural design drawings to
ensure completeness, consistency and correctness of drawings and to assist in
evolving solutions, based on preparation of 3D virtual construction model of
complete building. Providing training/interactive sessions to designated departmental
Engineers.

b) 3D modeling shall mainly include:

c) Structure: Includes foundations and footings, structural lintels, columns, beams, floor/roof
slabs stairs & ramps, shafts and pits (excluding reinforcement, which are not to be
modeled)

d) Architecture : Including internal/external walls, doors, windows, openings, flooring,
toilets, kitchens, false ceiling and curtain wall.

(xxiii) MEPF Services : Including all type of electrical points, linear quantities of sub mains
and circuits, MCBDBs, quantity of fire detector (above and below the false ceiling)
linear quantity of various sizes of fire fighting and sprinkler system pipes, sluice valves
etc.

(xxiv) External Services : Including Sewer, Rain water harvesting, Water supply grid,
irrigation gird, fire fighting grid, landscaping, BSES line, Electrical line etc.
(xxv) Incorporating information received from Engineer-in-Charge and client.

(xxvi) Issuing discrepancy reports.

(xxvii) Solution to various discrepancies as received and discussed with Engineer-in-Charge will be incorporated in the 3D virtual construction model.

(xxviii) The Consultant shall have to co-ordinate with the department and attend meetings with the department as and when required including meeting with the contractors.

(xxix) The consultant shall prepare the completion drawing and shall obtain completion certificate from local bodies.

3.0 SCOPE OF SERVICES

3.1 The consultant shall provide Comprehensive Consultancy Services in the following areas:

a). Architectural Services including building plans / Landscaping / Interior Design / Furniture / Signages

b). Quantity Surveying Services

c). Civil & Structural Engineering Services

d). Electrical Engineering Services

e). IT Services

f). Mechanical Engineering Services

g). Public Health Engineering Services

h). Waste management service if required

i). Interior design including partition, cabinet, storage spaces, cup boards and work stations.

j). Effluent Treatment Plant

k). Reverse Osmosis water treatment plant

l). Signages

m). Solar water heating system and piping connected.

n). Other services required, if any.

o). Supervision of work should be on call bans.

3.2 The Consultant shall provide comprehensive consultancy services broadly described hereinafter. However, it should be clearly understood that the description of services is only broad and the Consultant shall be required to perform any other services which may be required whether or not expressly mentioned hereinafter for Construction of various school buildings in Delhi to the entire projects requirement and satisfaction of the client.

3.2.1 Preliminary Stage

3.2.1 Carry out topographical survey and the survey of all existing services and other constraints existing in and around the site.

3.2.2 Carry out soil investigation of the site to establish the soil characteristics and other parameters required for the foundation design.

3.2.2.1 Master Plan

3.2.2.2 Development and Submission of the Draft Master Plan for development or Redevelopment of Govt. school buildings in Delhi.

3.2.2.3 Modifications of the draft master plan taking into account the comments and suggestions of the client and Engineer-in-charge.

3.2.2.4 Submission of the Final Master Plan to local bodies and incorporating changes, if any, suggested by them and re-submitting the same.
3.2.2.5 Obtaining approval of the master Plan from local authorities.

3.2.3 Concept design.
3.2.3.1 Interact with the user departments of client and finalise the functional plan.
3.2.3.2 Development of the concept design.
3.2.3.3 Submission of the draft concept design and make presentation of the scheme
3.2.3.4 Modifications of the draft concept plan taking into account the comments, suggestions etc. of the DUAC, Client and the Department if required.
3.2.3.5 Submission of the final concept design along with models, photograph etc. to DUAC if required. The cost of such models, photographs etc. shall be borne by the consultant.
3.2.3.6 Obtaining approval of the Concept design from DUAC if required.

3.2.4 Project report
3.2.4.1 Preparation of Project Report and Project cost estimate covering all project components including furniture, any other equipments required etc.

3.2.5 APPROVAL STAGE
3.2.5.1 Development of the Submission Plans.
3.2.5.2 Submission of the design, drawing and related document to concerned local authorities
3.2.5.3 Modifications of the design, drawing etc taking into account the comments, suggestions etc. of the local bodies
3.2.5.4 Re-Submission of the design and drawings to local authorities.
3.2.5.5 Obtaining approval of the design, Drawing etc from local bodies.
3.2.5.6 Carrying out Environment Impact Assessment, submission of the same and getting approval from concerned authorities.

3.3 DETAILED DESIGN STAGE

1.1.1 General Requirements:
3.3.1.1 Based on the accepted and approved concept design, prepare Detailed Project Report (DPR) for each of the building containing, amongst others, the following:

a). Introduction and background.

b). Form and structure of the building

c). Infrastructure Planning & Layout

d). Phasing & Scheduling

e). IT/computerization

f). Environmental pollution control, biomedical waste treatment, disposal etc.

g). Detailed cost estimates for civil works (Buildings, internal & external services, Horticulture, Landscaping etc.), internal and external electrification works, HVAC works, DG Sets, Sub-Station, Fire Fighting, Fire Alarm, CCTV, Solar Pannel, Solar Heater etc.

h). Alternate energy sources

i). Broad guidelines for building maintenance, sanitation, security etc.
4.0 ARCHITECTURAL SERVICES

4.1 Visit the site, Carry out initial appraisal, Take particulars for site and Prepare reports on the condition of site

4.2 Develop concept design satisfying the functional requirements and taking into account the site constraints. In case of the built up sites / complexes, the consultant shall develop the buildings / services in such a way that they fit in the existing building environment to the satisfaction of the department / client.

4.3 Obtain the client's approval to the design and the scheme.

4.4 Develop the landscaping details in coordination and harmony with existing buildings / features in the already existing built up sites / complexes. The consultant shall suitably modify the existing landscaping arrangement, if required.

4.5 Develop the interior details as per requirement and the type of furniture and equipments in consultation with user departments of the client.

4.6 Obtain information required for making applications to statutory authorities.

4.7 Prepare Submission drawings, Scale models and other documents required for submission to local authorities and obtain necessary approvals from all concerned authorities.

4.8 Prepare tender drawings, schedules and specification of materials and workmanship, in sufficient detail to enable to prepare a tender. The tender drawings & documents shall include detailed site plan, detailed drawings for each buildings including floor plans, elevations, door & window schedules, finishing schedules, wall profiles, Staircases, ramp and lift details, details of important building parts / areas, landscape & horticulture details etc. As far as possible standards of quality performance requirement and descriptive names shall be used rather than specific products or brand names.

4.9 Prepare and issue “Good for construction” drawings. Drawings shall be adequately detailed and shall contain enough information to enable construction, full measurement, pricing and production of bill for payment. The working drawing shall include

4.9.1 Layout Plan showing:
- All proposed buildings, play fields etc.
- Blow up of road junction /
- parking area and other such area as required.
- Coordinated External services

4.9.2 Detailed Drawings
- Floor plans, fully coordinated with all services/disciplines
- Elevations
- Sections
- Wall profiles
- Doors & Window details
- Stairs/Ramps/Lifts details
- Details of building parts, areas, critical special treatments
- Kitchen/Toilet details
- Flooring pattern and details
- Dado details
- False ceiling details
- Details of furniture and Furniture layout
- Signages
4.9.3 Landscape & Horticulture

- Drawings of landscape including blow up of critical areas / landscapes / plantscapes in detailed coordination with all external services
- Horticulture details

4.9.4 Any other details required for completion of the buildings/services.

4.9.5 Inspect the works and attend meetings during execution to give clarifications, if any, and to modify the drawings as per the site/construction requirements.

5.0 QUANTITY SURVEYING SERVICES

5.1 General

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

5.2 Cost estimating & financial services

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

- Cost planning for the project, including the cost of associated services, site development, landscaping etc.
- Prepare and submit cost estimates for the project at the conceptual design stage, preliminary design stage and detailed design stage.
- Carry out inspections and surveys and prepare detailed cost estimates for the buildings, utilities, services etc.
- Cost planning, cost monitoring and cost reporting during the various stages of design and to take appropriate measures to control it.
- Prepare complete tender documentation including specifications, detailed Bill of Quantities, Rates Appraisal and analysis, Conditions of Contract etc.
- Advise on any aspect that can influence the project's cost and measures of cost control.
- Preparation of Bid/contract documents.
- Assist in Carrying out analysis and evaluation of tenders and submit tender reports.
- Site meeting, coordination meetings and any other meetings as and when required at site.
- Carry out such other duties as may be required of the Consultant in the construction stage on the project.

6.0 CIVIL & STRUCTURAL ENGINEERING SERVICES

6.1 General

6.1.1 The Consultant shall perform all the Civil & Structural design work necessary by utilizing the most economical, effective and widely accepted engineering concepts/practices and shall at all times show a high degree of professionalism in his work.

6.1.2 The Consultant will be fully responsible for the design of all the Civil & structural engineering works. The services to be provided by the Consultant shall include but not be limited to the following:
6.1.2.1 Design basis

i. Conduct surveys, tests and other investigations as required to determine the basis to accomplish economic and safe designs.

ii. Planning for the structural arrangements with the architectural design.

iii. Co-ordination & finalization of structural arrangement
   - Beam & Column location
   - Beam & Column size finalization
   - Slab profiles
   - Equipment load estimation
   - All other detailing required for the finalisation of design

iv. Finalization of design basis & structural systems.

v. Proof checking of structural design / drawings and issuing the “Good for construction” drawings. The consultant shall also submit the structural design/details (input / output) by the structural consultant and the proof checking thereof along with comments etc. of proof consultant.

6.1.2.2 Design development

- Structural framing for Analysis.
- Design of beams & columns
- Workout of support reactions for the design of foundations
- Design of foundations.
- Design of slabs
- Design of staircases, ramps and equipment supports
- Design of all other structural and non structural elements

6.1.2.3 Drawing stage

- Foundation plans & details
- Column, walls and beam layout plans
- Floor Framing plans, fully coordinated with all disciplines
- Floor slab structural details
- Column & beam structural details
- Staircases, ramps, lifts shafts and machine room details
- All other details and sketches required for proper execution of the works

7.0 ELECTRICAL ENGINEERING SERVICES

7.1 General

The services to be provided by Consultant shall include (Preliminary & Detailed Estimates, Design and Drawings etc.)

- Design of electrical installations including all electrical fittings/fixtures etc., as necessary.
• Power Supply & Distribution system including emergency and backup supply, sub-station etc
• Telephone system, intercom communications facilities, Public Address system.
• Sound reinforcement system as necessary, stage lighting.
• Cable TV/dish antenna system
• Lightning protection and Earthing system.
• External Lighting
• UPS back up for sensitive / critical equipments.
• Building / Energy Management system controlling all essential services. This system should allow switching off particular areas when not in use. A manual bypass also to be provided which will allow bypassing / overriding the building / Energy management System when necessary.
• Lifts, Escalators.
• Solar Water & Lighting System, if required.
• Any other services required but not specifically indicated.
• Proper coordination with civil engineering / mechanical engineering features / services.

Note: - All the Electrical and mechanical services, as mentioned above shall be designed by the consultant. No extra payment shall be made or deducted, if any modifications are required as per chief requirement in above.

7.2 Services
7.2.1 Carry out basic and detailed designs 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:
7.2.2 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.
7.2.3 Design the distribution systems and prepare single line diagrams with details of accessories and equipment.
7.2.4 Specify the details and capacities of HT panels, Transformers, L T 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, L T panel & DG sets.
7.2.5 Design the Sub-station comprising of the HT panel room, transformer room, L T panels room, 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.
7.2.6 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.
7.2.7 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.
7.2.8 Telephone, Intercom & Communication system

- 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.
- Check and approve detailed drawings of the suppliers and manufacturers.

7.2.9 Sound Reinforcement 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 P A 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;

7.2.10 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.
- Check and approve the suppliers’/manufacturers drawings/documents.

7.2.11 Lightning Protection and earthing System

Lightning 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.
7.2.12 **External Lighting**
- Assess the external lighting requirement for wards, 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;

7.2.13 **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 specifications and bills of quantities;
- Check and approve detailed drawings of the suppliers/ manufacturers;

7.2.15 **Solar Heating & R.O. system.**
- Planning & installation of Solar Heating system and R.O. system for buildings.
- Prepare specifications and bills of quantities;
- Check and approve detailed drawings of the suppliers/ manufacturers;

8.0 **MECHANICAL ENGINEERING SERVICES**

8.1 **General**
The services to be provided by Consultant shall include.

8.1.1 Design of Heating, Ventilation & Air-conditioning systems as necessary (Central and/or individual air-conditioning Systems) including pressurization of lift wells & lobby, ventilation of toilets, basements and other areas etc.

8.1.2 Fire detection, Fire Extinguishing System and Automatic Alarm System.

8.1.3 Lifts, escalators, water pumps etc.

8.1.4 Proper coordination with civil / electrical engineering features / services.

8.2 **Services**
To carry out basic and detailed design of the required Heating, Ventilation & Air conditioning system if required. This shall include amongst others the following services:

8.2.1 Carry out preliminary and detailed design and prepare drawings indicating the details as mentioned below:
- Heat Load calculations for Summer, Monsoon and 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
8.2.2 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.

8.2.3 Design ducting, piping and A.C Plant room layouts floor wise and to specify all electrical requirements of the A.C. systems.

8.2.4 Prepare A.C system details in plans and sections.

8.2.5 Design, pressurization system for lift lobby and staircase and ventilation system for toilets, basement and other areas and according to the specific requirements of the areas to be ventilated.

8.2.10 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.

8.2.11 Lifts, escalators,

- Specify the capacity and type of lifts/escalators to be provided and prepare layout for the necessary machine areas.
- Finalize the design for lifts and escalators installation as per the Statutory/local regulations.
- Prepare specifications and bills of quantities.
- Check and approve the suppliers'/ manufacturers drawings/ documents.

8.2.12 Water pumps

- Specify the type of pumps for water supply
- Prepare specifications and bills of quantities.
- Check and approve the suppliers'/ manufacturers drawings/ documents.

9.0 PUBLIC HEALTH ENGINEERING

9.1 All the design and drawings should be well coordinated with Architecture, structure and other services drawings.

9.1.1 All designs shall be as per the latest Indian Standards, Local bye-laws and Statutory norms/regulation.

9.1.2 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.

9.1.3 The services shall include following major components:

- Water Supply System
- Sewerage System
- Drainage System
- Fire-fighting & Fire Suppression System
10. Services

10.1 Water Supply System

- Calculation of water requirements for domestic and non-domestic services.
- Design and prepare working drawings of internal and external water supply system including Underground tank, Overhead tank, Water treatment plant, Pumping stations, rising mains, distribution system and internal plumbing, recycling of treated waste water etc.
- Design of hot water supply system consisting of centralized / Localised hot water supply system Obtain approval from local bodies for Municipal water supply connections, drilling of tube wells etc.
- Prepare specifications and bill of quantities.
- Check and approve detailed drawings and data sheets of suppliers/manufacturers.

10.2 Internal sanitary installations

- Design and prepare working drawings of internal sanitary installations.
- Identify, design and prepare working drawings of handicapped friendly toilets and sanitary installations.
- Prepare specifications and bill of quantities.
- Check and approve detailed drawings and data sheets of suppliers/manufacturers.

10.3 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.
- Obtain approval from statutory and local bodies for waste disposal.
- Prepare specifications and bill of quantities.
- Check and approve detailed drawings and data sheets of suppliers/manufacturers.

10.4 Drainage

- Design and prepare working drawings for storm water drainage including roof drainage, service area drainage and surface drainage.
- 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.
- Check and approve detailed drawings and data sheets of suppliers/manufacturers.
10.5 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.
- Size of all equipment required and prepare detailed specifications and bill of quantities.
- Obtain necessary license/permissions from the statutory/local fire authority /bodies etc. as required.
- Check and approve detailed drawings and data sheet of suppliers/ manufacturers.

11.0 Site development works

11.1 Design and prepare working drawings (longitudinal & cross section) for roads/ footpaths/ parking areas etc.
11.2 Design and prepare working drawings of irrigation system for horticulture.
11.3 Design and prepare working drawings for water bodies / fountains.
11.4 Design and prepare working drawings for recreational facilities like swimming pool etc.
11.5 Prepare specifications and bill of quantities.
11.6 Check and approve detailed drawings of suppliers/ manufacturers.

12.0 WASTE MANAGEMENT SYSTEM

12.1 Prepare design, specifications, bill of quantities for Waste Management System in line with the latest guidelines of CPC & Ministry of Environment & Forest notification.
12.2 Check and approve detailed drawings of suppliers/ manufacturers.
12.3 Obtaining clearances from the statutory bodies and imparting training to the clients representatives.

13.0 Other Services

13.1 Project Documentation
- Prepare and submit required number of copies of monthly progress accomplishment reports of the project.
- Ensure the preparation of AS-BUILT drawings and record all approved deviations and changes in drawings.

13.2 The consultancy scope and fee shall be inclusive of all above obligations. It shall also include any other service not explicitly mentioned but reasonably required for the project development. Nothing extra shall be payable for this service. It is clarified that if any of above services is not required for a particular project, no cost adjustment shall be made.
Annexure - B

FORMATS FOR TECHNICAL PROPOSALS
LETTER OF TRANSMITTAL

To
Executive Engineer,
C.B.M.D. M-331,
PWD, GNCTD, Dr. B.S.A. Hospital Campus,
Rohini, Sector-6, Delhi- 110085.

Sub:- Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of school buildings under PWD, GNCT Delhi.

Sir,

I/We have read and examined the complete document including the instructions to bidders, terms of reference and general conditions of the contract and services to be provided during pre-construction stage, construction stage for above-mentioned work.

I/We hereby submit our application on prescribed formats for undertaking the work referred to in the aforesaid documents upon the terms and conditions contained/ referred to therein. I/We agree to abide by and fulfill all the terms, conditions and provisions of the aforesaid documents.

I/We undertake to empanel for the comprehensive consultancy on the terms & conditions of empanelment and to work immediately on receipt of the letter of acceptance and to complete the work within the time frame, as decided by the Chief Engineer.

The offer is submitted in the separate sealed covers marked as “Technical Bid” (Two copies), and Earnest money. All two sealed envelop have been placed in a third sealed envelop with name of work super scribed on each envelop.

The “Technical Bid” contains the details as per the formats given in Annexure-B duly filled in and duly signed by authorized representative.

By virtue of my/our signature below, I/We confirm that to the best of my/our knowledge and belief the information contained in the specified formats, sections thereof and any annexure thereto and all supporting and explanatory information is truthful and exact.

Signature (Authorized Signatory of consultant)
(In capacity of)
Duly authorized to sign (Name and Address of Consultant)
The tender on behalf of

Witness
Date:
Address:
## Details of Registration of Firm

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Company / Firm</th>
<th>Type of firm i.e. property, Partnership, Pvt. Ltd. etc.</th>
<th>Date of Inception registration number, date and validity</th>
<th>Registering authority</th>
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</thead>
<tbody>
<tr>
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<td></td>
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</tr>
</tbody>
</table>

**Signature of Applicant**
FORM ‘A’
FINANCIAL INFORMATION

I. Financial Analysis: - Details to be furnished duly supported by figures in Balance sheet / Profit and Loss Account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

<table>
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<th>Years</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15 *</th>
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</thead>
</table>

* In case ITR for 2014-15 not yet filed, balance sheet duly certified by Charted Accountant shall be accepted. Otherwise details for 2009-10 can be given instead of 2014-15

(i) Gross Annual turn-over on consultancy works:

(ii) Profit / Loss

II. The following certificates are enclosed:
(a) Current Income Tax Clearance Certificate.

or


Signature of Chartered Accountant with Seal        Signature of Applicant(s)
FORM ‘B’
DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST SEVEN YEARS
ENDING LAST DAY OF THE MONTH JUNE-2015

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of work / project and location</th>
<th>No. of storeys</th>
<th>Provisio n of Basement</th>
<th>Owner or sponsoring organisation</th>
<th>Cost of work in lacs</th>
<th>Date of commencement as per contract</th>
<th>Stipulated date of completion</th>
<th>Actual date of completion</th>
<th>Litigation / arbitration pending / in progress with details Also indicate the gross amount claimed and amount awarded by the Arbitrator.</th>
<th>Name and address / telephone number of officer to whom reference may be made (for completion certificate)</th>
<th>Remarks</th>
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Signature of Bidder(s)
Annexure – B-5

COMPOSITION OF THE TEAM PERSONNEL AND THE TASK WHICH WOULD BE ASSIGNED TO EACH TEAM MEMBER

(Details of only key Technical & Managerial Staff need to be given)

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<tr>
<th>S.No.</th>
<th>Name</th>
<th>Position</th>
<th>Task Assignment</th>
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FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY TEAM PERSONAL

1. Proposed Position: ________________________________________________

2. Name of the personal :
   _______________________________________________________________

3. Date of Birth : ___________________________ (Please furnish proof of age)

4. Nationality : ____________________________________________________

5. Educational Qualifications : (Summarize college / university and other specialized education of staff member, giving names of college, dates attended and degrees obtained.) (Please furnish proof of qualification.)

6. Membership of Professional Societies: ______________________________

7. Employment Record: (Starting with present position, list in reversed order, every employment held. List all positions held by staff member since graduation, giving dates, names of employing organization, title of positions held and locations of assignments. Experience period of specific assignment must be clearly mentioned, also give client references, where appropriate).

8. Summary of experience
   i. Total experience in the field proposed to be assigned: ____________ Yrs.
   ii. Responsibilities held during the experience period as per 8.1

9. Permanent Employment with the firm (Yes / No)
   If yes, how many years :
   If no, what is the employment :
   Arrangement with the firm? :

10. Details of the current assignment and the time duration for which services are required for the current assignment.

Certification:

1. I, the undersigned, certify that to the best of my knowledge and belief, this bio data correctly described myself my qualifications and my experience.

Signature of the Person _____________________________
Place __________________________
Date __________________________

Signature of the Authorized Representative of the firm

Place __________________________
Date __________________________

Note: Each page of the CV shall be signed in ink by both the staff member and the Authorized Representative of the firm. Photocopies will not be considered for evaluation.
DETAILS OF KEY PERSONNEL

(To be deployed for this Project. Only regular employers who have been with the applicant of consultant member of the group for at least 6 months should be included. Information should be given separately for each member of the group in case of a joint venture, consortium or partnership.

A. Personnel from Consultant's Organization

<table>
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<tr>
<th>S.No.</th>
<th>Key position</th>
<th>Name of Staff</th>
<th>Qualification</th>
<th>Years of Experience</th>
<th>Field specialization</th>
<th>Man-Months proposed</th>
<th>Remarks</th>
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B. Personnel from Sub-consultant's organization.

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<th>S.No.</th>
<th>Key position</th>
<th>Name of Staff</th>
<th>Qualification</th>
<th>Years of Experience</th>
<th>Field specialization</th>
<th>Man-Months proposed</th>
<th>Remarks</th>
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Note:
1. Show personnel (for all areas as mentioned in TOR)
2. Show duration by solid line for continuous inputs and broken line for staggered inputs considering the present commitments.
3. Associates, consultant/ key personals if not in house, then prior approval of Chief Engineer, B-1 will be required before their engagement.
APPREACH PAPER ON METHODOLOGY
PROPOSED FOR PERFORMING THE ASSIGNMENT

The approach and methodology will be detailed precisely under the following topics:

1. Composition of the team with emphasis on Team leader. [not more than one page of A-4 size]
2. Methodology proposed for performing assignment [not more than one page of A-4 size]
3. Comments on the total project demonstrating bidders knowledge and understanding of project requirement [not more than one page of A-4 size]
4. Quality Assurance system for consultancy assignment prepared [not more than one page of A-4 size]

Note: 1) Marks will be deducted for writing lengthy and out of context approach and methodology for the assignment.
FORM OF AGREEMENT

The agreement made on this……………………….day of month……………...year ……………………………………… between the President of India, represented by Executive Engineer, PWD M-331 on the one hand hereinafter known as the President, which shall include his duly authorized representatives and officers of the CPWD/PWD, Government of Delhi and (name of consultant) on the other hand, hereinafter known as the Consultant, a firm carrying the business of rendering consultancy services from the premises located (address of consultant), which includes its authorized representatives, and legal heirs, joint venture partners each of which will be finally and severally liable to the President for all the obligations under this contract.

1. In consideration of the payment to be made by the department to the consultant, the consultant hereby agrees with the Engineer-in-charge to perform the service in the best professional manner and in conformity with the terms of reference and conditions of this agreement.

2. The following documents shall be part of this agreement

(a) Annexure C-1

for the work “Empanelment of Consultants/Architectural firms for Comprehensive integrated consultancy services for construction of School Buildings under PWD, GNCT Delhi.

Dated .............

(Consultant)

Executive Engineer
CBMD M-331, PWD,
Dr. B.S.A. Hospital
Campus, Sector-6, Rohini,
Delhi-110085
(For & on behalf of the President of India)

1. Witness: 2. Witness:
UNDEARTAKING

I/We have read and examined the Technical Bid documents.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in the ‘Time Frame’ for various activities in all respects with the specifications, design, drawings and instructions in writing referred to in Rules and Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the technical bid open for **Two years** from the date of empanelment and not to make any modifications in its terms and conditions.

A sum of **Rs. 50,000.00 (Rupees Fifty Thousand Only)** has been deposited in cash / receipt treasury challan / deposit at call receipt of a scheduled bank / fixed deposit receipt of scheduled bank / demand draft of a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors in office shall without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely. Further, If I/We fail to commence work as specified, I/WE agree that the said President of India or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein. Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/we am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated ------------------------

Signature of Consultants
Postal Address

Witness:
Address:
Occupation:
1.0 DEFINITIONS

1.1 For the purpose of this Agreement, the following words and expressions shall have the meaning hereby assigned to them, except where the context requires otherwise.

1.1.2 The **Engineer-in-Charge** means the Engineer Officer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of the President of India.

1.1.3 **“Consultant”** shall mean the person, firm and/or company whose offer for consultancy works is/are accepted by the employer which includes its authorized representatives, and legal heirs, engaged by the Consultant for undertaking the design.

1.1.4 **“Approved”** shall mean approval granted by the Engineer-in-Charge in writing or accepted by him for incorporation in the works.

1.1.5 **Client** means PWD, Govt. of Delhi.

1.1.6 **APPLICANT / BIDDER / CONSULTANT:** Means the individual, proprietary firm, limited company, clearly indicating the lead member and distribution of scope of services amongst the members.

1.1.7 **“Department”** means Public Works Department through Engineer-in-Charge until and unless stated otherwise.

1.1.8 **“YEAR”** Means “Financial Year” until and unless stated otherwise.

1.1.9 Panel of consultants shall be formed on the basis of technical bids. Financial bids shall be invited separately for individual project or group of projects from the panel. Some of the following shall be applicable after award of work on the basis of financial bids to be called separately.

1.0 PERFORMANCE GUARANTEE

i. The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the agreed contracted amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provision in the contract) within 15 days of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge upto a maximum period of seven days on written request of the consultant stating the reason for delay in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge. This Guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at Call receipt of any Schedule bank/Banker’s Cheque of any schedule bank/Demand Draft of any scheduled/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Schedule Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the government as part of the performance guarantee and the bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the consultant and the consultant shall forthwith on demand furnish additional security to the Government to make good the deficit.

ii. The performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. The performance guarantee shall be returned to the consultant, without any interest on approval of completion drawings by the local bodies.
iii. The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

a) Failure by the consultant to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.

b) Failure by the consultant to pay President of India any amount due, either as agreed by the consultant or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of this effect by Engineer-in-Charge.

iv. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the President of India.

3.0 SECURITY DEPOSIT

3.1 An amount equivalent to 5% (five percent) of bill amount shall be deducted from each bill of the consultant till a Security Deposit equivalent to 5% of agreed fee, is reached for fulfilling the terms and condition of contract faithfully and honestly. The security deposit will be refunded after successful commissioning and handing over of the project. Security Deposit in Proportion of the built-up area will be released after completion and handing over of individual buildings. For the operation of this clause the built up area as indicated in the approved master plan shall be considered. The Earnest Money deposited at the time of submitting the bid shall be treated as a part of the security deposit for the successful bidder.

4.0 ABANDONMENT OF WORK

4.1 If the Consultant abandons the work for any reasons whatsoever or becomes incapacitated from acting as Consultant as aforesaid, the Engineer-in-Charge may make full use of all or any of the drawings prepared by the Consultant and that the Consultant shall be liable to pay such damages as may be assessed by the Engineer-in-Charge subject to a maximum of 10% (Ten percent) of the total fee payable to the Consultant under this agreement. The department may make full use of all or any of the drawings prepared by the consultant and proceed from the stage from where the consultant left the work.

4.2 If at any time after acceptance of offer of consultancy, department decide to abandon or reduce the scope of work for any reason whatsoever, the department shall give notice to the consultant in writing to that effect and he shall act accordingly. The consultant have no claim to any payment of compensation or otherwise whatsoever. The consultant shall be entitled to all such fee for the services rendered and liable to refund the excess payment, if any made to him over and above what is due in terms of this agreement.

5.0 DETERMINATION OR RESCISSION OF AGREEMENT

The Engineer-in-Charge without any prejudice to its right against the Consultant in respect of any delay by notice in writing absolutely determine the contract in any of the following cases:

I. If the Consultant being a firm/company shall pass a resolution or the court shall make any order that the firm/company shall be wound up or a receiver or a manager on behalf of the creditor shall be appointed or if circumstances shall arise which entitle the court or creditor to appoint a receiver or a manager or which entitles the court to make up a winding order.

II. If the Consultant is in breach of any terms of agreement.

When the Consultant has made himself liable for action under any of the cases aforesaid the Employer shall have power:
6.0 DISPUTE RESOLUTION

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

(i) If the consultant considers any work demanded of him to be outside the requirements of the contract or disputes on any drawings, record or decision given in writing by the Engineer-in-charge on any matter in connection with arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Superintending Engineer in writing for written instruction or decision. Thereupon, the Superintending Engineer shall give his written instructions or decision within a period of one month from the receipt of the consultant’s letter.

If the Superintending Engineer fails to give his instructions or decision in writing within the aforesaid period or if the consultant(s) is dissatisfied with the instructions or decision of the Superintending Engineer, the consultant may, within 15 days of the receipt of Superintending Engineer's decision, appeal to the Chief Engineer who shall offer an opportunity to the consultant to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Chief Engineer shall give his decision within 30 days of receipt of consultant's appeal. If the consultant is dissatisfied with this decision, the consultant shall within a period of 30 days from receipt of the decision, given notice to the Chief Engineer for appointment of arbitrator failing which the said decision shall be final, binding and conclusive and not referable to adjudication by the arbitrator.

(ii) Except where the decision has become final, binding and conclusive in terms of sub-Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Chief Engineer in charge of the work or if there be no Chief Engineer, the administrative head of the PWD. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason, whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it wall left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Chief Engineer of the appeal.

It is also a term of this contract that no person other than a person appointed by such Chief Engineer in-charge of the work or the administrative head of the PWD, as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of the contract that if the consultant does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-Charge that the final bill is ready for payment, the claim of the consultant shall be deemed to have been waived and absolutely barred and the Department shall be discharged and released of all liabilities under the contract and in respect of these claims.
The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fee of the arbitrator, if any, shall be paid before the award is made by both the parties on fifty percent each basis. The cost of the reference and of the award shall be at the discretion of the arbitrator who may direct of the parties any by whom and in what manner, such costs or any part thereof shall be paid and fixed or settle the amount of costs to be so paid.

7.0 RIGHTS & RESPONSIBILITIES

7.1 The responsibilities about the efficiency of the proposal shall rest with the Consultant.

7.2 All plans, designs and data collected for this project shall be the property of Department. The Consultant shall have no right to them in any way without the written consent of the Engineer-in-Charge (PWD). The entire information as furnished to the Consultant as well as that gathered by the Consultant in the process of inspection shall be kept strictly confidential and not passed on to any unauthorized person. The Consultant shall also indemnify Department from and against all claims and proceedings for or on account of infringement of any patent rights, etc. in respect of each and every part of the work. Such indemnity shall be furnished to the Engineer-in-Charge upon acceptance of quotation and before any payment is made.

7.3 The proof checking, if any, got done by a third party by the client shall not absolve the lead consultant of any of his responsibilities. All reports including design/drawings submitted by them shall bear the signature of the Team Leader/authorized representative of the consulting firm and the consultants shall be fully responsible for the soundness, correctness and feasibility of the design prepared by them.

8.0 COMPENSATION FOR DELAY

8.1 The time allowed for carrying out the work shall be strictly observed by the consultant and shall be deemed to be the essence of the contract on the part of the consultant. The work shall, throughout the stipulated period of the contract be proceeded with all diligence and in the event of failure of the Consultant to complete the work within time schedule, as specified in the document or within the validity of extended time period, the consultant liable for a compensation at the rate of 1.5% of agreed fee per month of delay to be computed on per day basis subject to maximum of ten percent of agreed fee shall be levied on the consultant.

The decision of Superintending Engineer of concerned project as to the period of delay on the part of the consultant and the quantum of compensation for such delay shall be final and binding on the consultant.
9.0 EXTENSION OF TIME

If the consultant is unavoidably hindered in carrying out the designs/drawings on account of delayed decision or the approval by the department which are necessary to carry out further work, he shall be allowed suitable extension of time by Engineer-in-Charge, whose decision shall be final and binding on the consultant. No claim by the consultant shall be made against the department for such delayed approvals/decisions by the department, except for grant of suitable extension of time.

10.0 ADDITIONS AND ALTERATIONS

The employer, shall have the right to request in writing changes, additions, modifications in the scheme to request in writing additional work in connection therewith and the Consultant shall comply with such request. If the Employer deviates substantially from the original scheme which involves extra services, expenses and extra labour on the part of the Consultant for making changes and modifications or other documents rendering major part or the whole of his work in fructuous the Consultant may then be compensated for such extra services and expenses on quantum merit basis at percentage applicable under this agreement, unless such changes, alterations are due to Consultants own omission and/or discrepancies including changes proposed by the Consultant. The decision of the employer shall be final and binding on whether the deviations and additions are substantial and required any compensation to be paid to the Consultant. However, for the minor modification or alteration which does not effect the entire design, planning etc. no extra amount will be payable.

11.0 NUMBER OF DOCUMENTS AND COPY RIGHT

11.1 All the documents/drawings, designs, reports and any other details envisaged under this agreement shall be supplied in five copies. All drawings as required for submission to all the local bodies and other authorities shall be submitted as per the requirement of local body. All the drawings for the comments, discussion and approval of employer shall be submitted in triplicate. Six copies of all the final drawings shall be submitted to the Engineer-in-Charge along with one reproducible in A-1 or large size along with a soft copy in CD. If there is any revision in any drawing/document for any reason, six copies of drawing/document shall be re-issued along with soft copy in CD without any extra charges. All these drawings will become the property of the Engineer-in-Charge. The Engineer-in-Charge may use these drawings in part or full in any other work without any notice to the consultant and without any financial claim of the consultant.

11.2 The drawings cannot be issued to any other person, firm or authority or used by the Consultant for any other project. No copies of any drawings or documents shall be issued to anyone except the Engineer-in-Charge and/or his authorized representative.

12.0 GENERAL CONDITIONS

12.1 The Architectural Consultant shall be fully responsible for the technical soundness of the proposal including those of specialists engaged if any, by him.

12.2 The Engineer-in-Charge will have the liberty to supervise and inspect the work of Consultant and/or his sub-Consultants at any time by any officer nominated by him who shall be at liberty to examine the records/documents.

12.3 The Proposals shall be based on National code of practice, local bye-laws, environmental regulations and design norms and sound engineering practices.
12.4 The Consultant shall render every assistance, guidance and advise in general to the Engineer-Charge on any matter concerning the technical aspects of the project.

12.5 The Consultant shall promptly notify the Engineer-in-Charge of any change in the constitution of his firm. It shall be open to the Engineer-in-Charge to terminate the Agreement on the death, retirement, insanity or insolvency of any person being Director in the said firm, or on the addition or introduction of a new Director not promptly informed in writing to the Engineer-in-Charge. But until its termination by the Engineer-in-Charge as foresaid, this Agreement shall continue to be in full force and effect notwithstanding any changes in the constitution of the firm by death, retirement, insanity or insolvency of any of its Director or addition or introduction of any new Director. In case of death or retirement, the surviving or remaining Directors of the firm shall be jointly and severally liable for the due and satisfactory performance of all the terms and conditions of this Agreement.

12.6 The Consultant shall during the period of this assignment, and till the satisfactory completion of the project, act as consultant and give related advice regarding the project.

12.7 The professional fees of the Consultant shall be inclusive of all cost related to visits to the site, attending meetings, conferences and making suitable presentations.

12.8 Consultant’s professionals fees are also inclusive of responsibilities of carrying out modifications in design and drawings

12.9 The Consultant shall exercise all reasonable skill, care and diligence in the discharge of duties hereby agreed to be performed by them

13.0 TIME FOR COMPLETION

13.1 The time of completion of the consultancy for detailed design (excluding the services to be rendered during the construction stage) for a project shall be about 40 weeks (Forty Weeks) from the date of the letter of intimating acceptance of offer for consultancy services which may vary project to project depending on the magnitude of work involved & shall be decided by the competent authority accordingly. However as the supervision of works is also included in the scope of this assignments the time for completion will get extended accordingly.

13.2 If the work remains un-commenced/or incomplete at any stage with reference to time schedule, and reason for delay can not be substantiated, compensation at the rate of 1.5% per month of delay to be computed on per day basis subject to maximum of ten percent of agreed fee shall be levied on the consultant. The decision of Superintending Engineer of concerned project as to the period of delay on the part of the consultant and the quantum of compensation for such delay shall be final and binding on the consultant. No claim of the consultant shall lie against the department for such delayed approvals/decisions by the department, excepting suitable extension of time.

13.3 If the consultant is unavoidably hindered in carrying out the designs/drawings on account of delayed decision or the approval by the departments, which are necessary to carry out further work, he shall be allowed suitable extension of time by Superintending Engineer of the Project, whose decision shall be final and binding on the consultant. No claim of the consultant shall lie against the department for such delayed approvals/decisions by the department, excepting suitable extension of time.

13.4 Tentative schedule of the work within the stipulated period is indicated below which should be adhered to. However it should be noted that the total period for all activities mentioned below should not exceed 40 weeks. The consultant shall engage check consultant immediately after award of work and no separate activity schedule has been worked out. The consultant must ensure the proof checking job progresses simultaneously so that final results from the check consultant are complete.
14.0 RESPONSIBILITY OF ACCURACY OF PROJECT PROPOSAL

14.1 The consultant shall be responsible for accuracy of the data collected and the designs, drawings and construction drawings prepared by him as a part of the Project. He shall indemnify the department through a performance guarantee against any action arising out of such inaccuracies in the work, which might surface at any time at a later date of implementation of the project. He shall furnish a bank guarantee for an amount to the extent of 5% (five percent) of the total consultancy fees to be received by him before issue of award letter for commencement of the consultancy job.

14.2 The bank guarantee shall be valid for the entire period of the consultancy contract including extensions, if any. The bank guarantee shall be released on successful completion of consultancy work and on finding the accuracy of data/design/drawings by the department including data supplied by the consultant in the technical bid.

15.0 APPROVAL AND LIABILITIES

15.1 The Consultant shall inform the Employer about the name, professional qualifications and experience of sub-consultants proposed to be engaged by him, if any, and obtain prior written approval of the Employer for such engagement. However, the Consultant shall be responsible for the correctness and accuracy of designs and drawings prepared by sub-consultants.

15.2 The Consultant shall be responsible for technical soundness of the services rendered by him or his sub-consultants.

15.3 The Consultant shall supervise the said work to ensure that the work is carried out generally in accordance with the drawings, specifications, and his own concept. Appointment of Employer’s own supervisory staff shall not absolve the Consultant of his responsibility of supervision.

15.4 It shall be responsibility of the Consultant and his sub-consultants to prepare all design and drawings in accordance with the relevant BIS codes of practice and bye-laws.

15.5 The Consultant hereby agrees that the fee to be paid as provided in this agreement shall be in full discharge of functions to be performed by him and no claim whatsoever shall be made against the Employer in respect of any proprietary rights or copy rights relating to the plans, drawings, and specifications on his part or on the part of any other party.

15.6 The drawings, design, related details, and specifications prepared and acquired by the Consultant for the work entrusted to him under this agreement shall become the property of the Employer. The drawings, design, plans related details, and specifications shall not be issued to any other person, firm or authority or used by the Consultant for any other project without the prior permission of the Employer.

15.7 The Consultant shall not assign, sub-let, transfer any obligation or right of the Consultant under this agreement without the written consent of the Employer.

15.8 The Consultant shall indemnify and keep indemnified the Employer against any claim regarding drawings, designs, plans, related details and specifications prepared and acquired for the work entrusted to him under this agreement by any other party and against all costs and expenses incurred by the Employer in defending themselves against such claims.
# TIME FRAME

For guidance only for a upcoming project construction of School buildings under PWD, GNCT Delhi. (Actual time frame shall be prepared project-wise considering the magnitude & urgency of work in that particular project as decided by the concerned Chief Engineer)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Activities</th>
<th>Cumulative Period from the date of commencement (weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>PRELIMINARY STAGE</td>
<td></td>
</tr>
<tr>
<td>A.1</td>
<td>Submission of System Plan incorporating the strategy for the total project delivery.</td>
<td>01</td>
</tr>
<tr>
<td>A.2</td>
<td>Submission of design methodology</td>
<td>02</td>
</tr>
<tr>
<td>A.3</td>
<td>Submission of Conceptual drawings, Layout Plan</td>
<td>06</td>
</tr>
<tr>
<td>A.4</td>
<td>Submission of preliminary project report including preliminary cost estimate of all project components.</td>
<td>08</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>APPROVAL STAGE</td>
<td>Total Period from the date of approval of Preliminary Project Report</td>
</tr>
<tr>
<td></td>
<td>Preparation of submission plan, model, reports, EIA Study, submission and approval from local bodies and Environmental clearance.</td>
<td>15 weeks</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Detailed Design stage</td>
<td>Period from the date of order for detailed design (14 weeks). Remarks</td>
</tr>
<tr>
<td>C.1</td>
<td>Submission of preliminary architectural drawings for Structural design and service drawings</td>
<td>01</td>
</tr>
<tr>
<td>C.2</td>
<td>Submission of preliminary structural design and drawings with the input from Proof consultants.</td>
<td>02</td>
</tr>
<tr>
<td>C.3</td>
<td>Submission of all services Drawings</td>
<td>02</td>
</tr>
<tr>
<td>C.4</td>
<td>Submission of Detailed Estimate &amp; Details of measurement, Analysis of rate, tender drawings, specification and draft tender document.</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Date</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>C.5</td>
<td>Submission of final tender documents for call of tender etc.</td>
<td>01</td>
</tr>
<tr>
<td>C.6</td>
<td>Submission of Detailed Architectural &amp; Service Drawings “Good for Construction”.</td>
<td>03</td>
</tr>
<tr>
<td>C.7</td>
<td>Submission of structural design and drawings “Good for Construction”.</td>
<td>08</td>
</tr>
</tbody>
</table>

**D. CONSTRUCTION STAGE**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.1</td>
<td>During execution of project and after completion of the detailed drawing stage, intermittent inputs will be required from the consultants in clarifying the technical queries, site visit to make sure that the construction conforms to the design.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**E. POST CONSTRUCTION STAGE**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.1</td>
<td>Submission of completion drawings after physical completion of work.</td>
<td>02</td>
<td>After completion of Stage D-1</td>
</tr>
<tr>
<td>E.2</td>
<td>Obtaining completion certificate from local bodies.</td>
<td>08</td>
<td>After completion of Stage E-1</td>
</tr>
</tbody>
</table>
PAYMENT SCHEDULE (INDICATIVE)

(Can be changed by Chief Engineer if one or more services are not desired/ or are added)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Activities</th>
<th>% of total fee payable</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Preliminary Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1</td>
<td>On Submission of Conceptual drawings, Layout Plan &amp; approved by Client</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>A.4</td>
<td>On Submission of preliminary project report including preliminary cost estimate of all project components.</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td><strong>B</strong> Approval Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>On approval from local bodies and Environmental clearance.</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td><strong>C</strong> Detailed Design Stage *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.1</td>
<td>On Submission of preliminary architectural drawings, structural and service drawings.</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>C.2</td>
<td>On Submission of Detail Estimate &amp; Details of measurement, Analysis of rate, tender drawings, specification and draft tender document as per PWD procedures</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>C.4</td>
<td>On Submission of tender documents for call of tender as per PWD procedures</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>C.5</td>
<td>On Submission Detailed Architectural, structural &amp; Service Drawings</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>C.7</td>
<td>On Issue of “good for construction” drawings.</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td><strong>D</strong> Construction Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.1</td>
<td>On completion of construction (50% work)</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>D.2</td>
<td>On completion of construction (100% work)</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>D.3</td>
<td>On submission of completion drawings to the local bodies.</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>D.4</td>
<td>On approval of completion drawings by the local bodies.</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

Signed for and on behalf of consultant. Signed for and on behalf of President of India.

Executive Engineer
C.B.M.D. M-331,
PWD, GNCTD, Dr. B.S.A. Hospital Campus,
Rohini, Sector-6,
Delhi-110085.

<table>
<thead>
<tr>
<th>Cutting</th>
<th>Overwriting</th>
<th>Addition</th>
<th>Insertion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FORM OF PERFORMANCE SECURITY (GUARANTEE)  
BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called The Government) having offered to accept the terms and conditions of the proposed agreement between …………………………… and ………………………………………………………….. (hereinafter called the said contractor(s) for the work ……………………………………………………………………. (hereafter called the said agreement) having agreed to production of a irrevocable bank guarantee for Rs. ……………………………………………………………………… only) as a security/guarantee from the contractors(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We ……………………………………. (hereinafter referred to as the Bank) hereby (Indicate the name of the bank) undertake to pay to the Government an amount not exceeding Rs…………………. only on demand by the Government.

2. We ………………………………….. do hereby undertake to pay the amounts due (indicate the name of the bank) and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractors(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs……………. (Rs…………………………………… .……………only)

3. We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.

4. We ……………………………………… further agree that the guarantee herein (indicate the name of the bank) contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5. We ……………………………………… further agree with the Government that (indicate the name of the bank) the Government shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the bank or the contractor(s).
7. We _______________________________ lastly undertake not to revoke this
   (indicate the name of the bank)
   Guarantee except with the previous consent of the Government in writing.

8. This guarantee shall be valid up to__________ unless extended on demand by
   Government. Notwithstanding anything mentioned above, our liability against this guarantee is
   restricted to Rs.__________________ (Rupees ______________________ only)
   and unless a claim in writing is lodged with us within Six months of the date of expiry or the
   extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand
   discharged.
   Dated the ___________________________ day of ________________________ for
   ________________________________ (indicate the name of bank)

Dated:

Signed for and behalf of the firm

Witnesses:

   (Authorized signature of the firm)

1. -------------------------------
   (Name and Address)

2. -------------------------------
   (Name and Address)
Cutting
Overwriting: NIL
Addition
Insertion

AE(P)                  EE(P)