



**Executive Engineer (Elect.)
CIVIL CONSTRUCTION WING**

PRASAR BHARATI
(INDIA'S PUBLIC SERVICE BROADCASTER)

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**OFFICE OF THE EXECUTIVE ENGINEER (ELECTRICAL)
CIVIL CONSTRUCTION WING : ALL INDIA RADIO
SECOND FLOOR : CIVIL LINES : NAGPUR – 440001**

GST No.: 27AAAJPO288R2ZE

Date : 30-09-2021

File No. 02R/EEE/NGP/DRG/36/2021-22/ 353

NOTICE INVITING QUOTATION

The Sealed percentage rate quotations are hereby invited by the Executive Engineer (Elect.), CCW: AIR: Nagpur on behalf of the PRESIDENT OF INDIA from the reputed consultants having sufficient experience in the field of consultancy services and have rendered consultancy services during past Five years, ending August 2021 at least One similar nature of consultancy for work costing **21.85 Lakh** or above, two similar nature of consultancies for works costing **16.39 Lakh** or above or three similar nature of consultancies for works costing **10.93 Lakh** or above with CPWD, State PWD, MES, Railways, Public Sector Undertakings / Enterprises of the Central Govt. and State Govt. / in private sector of similar type of work (Similar works means Consultancy for HVAC and related works i.e. Heat Load calculation, Drawing, Designing and Supervision during Execution), in any of the Organization listed above for the following items of work. The quotations will be received up to 15:00 Hrs. of 07-10-2021. The quotations will be opened on same day at 15.30 Hrs. in presence of agency / their authorized representatives. The undersigned reserves the right to reject any or all the quotations without assigning any reasons.

Name of Work: 1. HVAC consultancy services for SITC of VRV / VRF system at AIR, Gwalior (M.P.)
2. HVAC consultancy services for SITC of VRV / VRF system at AIR, Rajgarh (M.P.)

S. No.	Description	Estimated cost of captioned work	Professional charges in terms of percentage (%) of estimated cost
1	Preparation of HVAC drawings for VRV / VRF system as per layout plan, calculation of heat load, selection of air conditioning system and equipment, preparation of BOQ, specifications, detailed estimate with supporting documents like analysis of rates, price lists, quotations, drawing sets, supervision etc. a) For SITC of VRV / VRF system at AIR, Gwalior b) For SITC of VRV / VRF system at AIR, Rajgarh	Rs. 27.32 Lakh Rs. 14.238 Lakh	

The bidder should only submit his bid if he considers himself eligible and has to submit the following documents along with the quotation in separate envelope.

- Copies of Registration certificate under Indian Partnership Act in case of Partnership Firm / Company Incorporation certificate in case of Ltd. Company / Affidavit in case of proprietary firm along with power of attorney and other documents as per the conditions stipulated under the General Rules & directions for the guidance of consultants in the tender document.
- Copies of experience / completion certificates of required amount as per the conditions of Tender Notice.
- Copy of PAN Card.
- Copy of Goods and Services Tax registration certificate.
- Copy of Financial turnover certificate for three years issued by Chartered Accountant.
- Organizational Hierarchy and staff / Office details.
- Copy of TDS certificate for work executed in private sector.

Executive Engineer (E)
CCW, AIR, NAGPUR

- Copy To.** 1. The Deputy Director General (Engg), 6th floor, New Broadcasting House, Parliament Street, New Delhi for publishing the NIQ on AIR website (e-mail)
2. ADG (Engg.)(WZ), TVM Section, Doordarshan Complex, 3rd Floor, PB Marg, Worli, Mumbai-30 (e-mail)
3. The Superintending Engineer (Elect.), CCW, AIR, Nagpur. (e-mail)

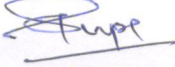
Qualification Conditions:

The minimum qualification conditions to be fulfilled by Consultants are as follows : The Proprietor / Partner / Director preferably shall be having professional qualifications and should be member of executive body. The other evaluating criteria are as under :- Should have executed similar works during last 5 years of minimum value as under :- Minimum HVAC works (for HVAC systems including VRF/Duct able AC's) and shall have executed one similar HVAC consultancy for works amounting to Rs. **21.85 Lakh** or above, in the same name. OR Minimum two similar HVAC consultancies for works amounting to Rs. **16.39 Lakh** or above, in the same name OR Minimum Three similar HVAC consultancy for works amounting to **10.93 Lakh** or above in the same name. If a bidder has worked as a sub consultant and submits an experience certificate issued directly by the client (Tendering Authority as per NIQ) shall be considered eligible. Similar works means planning, design, supervision of Projects for Centralized / VRF based AC for Commercial buildings / Offices / Installations etc. should have adequate in house infrastructure of Consultants / Engineers. Consultants min : 01 No. Engineer : 01 No. (Please submit organizational Hierarchy and staff / Office details etc.).

The bidders are advised to visit the site to assess the nature and quantum of work involved, before quoting their rates. The bidders should quote their professional charges on percentage basis (inclusive of G.S.T) for rendering Consultancy services for the captioned work to be carried out.

The general scope of professional services to be rendered by Consultants will include

- (a) Taking the CCW employer's instructions, visiting the site, preparing S.L.D which shall be in accordance with local governing codes / standards, regulations etc. (including carrying out necessary revisions till the sketch designs are finally approved by the CCW) making approximate estimate to enable the employer to take a decision on the sketch design.
- (b) The consultant shall submit a proper PERT CHART / Bar Chart incorporating all the activities required for the work.
- (c) Completion of the project well in time i.e. preparation of working drawings, S.L.D., detailed drawings, calling tender etc.
- (d) Preparing working drawings based on load calculation layout drawings & its electrical installations, civil works etc. detailed estimates and all such other particulars as may be necessary for preparation of bill of quantities including credit for old dismantled material.
- (e) Assisting CCW in preparing detailed tender documents for various trades viz. general suppliers/consultants work and specialist services such as electrical installation, Civil works etc. complete with articles of agreement, special conditions, conditions of contract, specification, bill of quantities including detailed analysis of rates based on market rates, DSR electrical and civil, time and progress charts etc.
- (f) Assisting CCW in Inviting tenders for this trade. Preparing contract documents for this trade and getting them executed by the concerned contractor.
- (g) Assuming full responsibility for supervision and proper execution of all works by the contractor who is engaged including control over quantities during the execution to restrict variation, if any, to the minimum. No deviations or substitutions should be authorized by the consultant without working out the financial implication and taking the approval of CCW. Obtaining final clearance from Local Body or any other such authority, if required. On completion of the project, prepare 'as built' drawings of HVAC and other services along with a brief report on the project and submitting 4 copies of the same for the records of the CCW. Further, the consultant shall verify and confirm that identification marks are made on all service installations/ cables/ wiring etc. for easy identifications to carry out maintenance jobs.
- (h) The consultant shall be wholly and solely responsible for the successful completion of the project in all respects consistent with safety and stability from the inception up to the handing over of the entire VRF air conditioning system to CCW. The consultant shall submit one complete set of S.L.D design, calculations and drawings for the CCW.
- (i) Any other services connected with the works usually and normally rendered by the Consultant, but not referred to herein above.


30.09.21

- (j) Regular supervision of the work during execution of work. Checking and verifying the materials received on site as per specifications.
- (k) Ensuring quality and timely completion of work. Testing/checking / commissioning of various equipments and certifying that all the equipment's are functioning as per the specifications.
- (l) Assisting CCW in case contractor resorts to arbitration / litigation.

SCOPE OF WORK:-

Possible scope of works for the appointed consultant:-

- a. Phase 1: Preparation of Detailed Project Report.
- b. Phase 2: Guidance and Support in Procurement.
- c. Phase 3: Review and Validation.
- d. Phase 4: Project supervision.

The detailed descriptions of scope of works stages wise are elaborated as under:-

Phase 1: Preparation of Detailed Project Report:

A detailed project report (DPR) for the project would be prepared by Consultant. Tasks in this phase shall cover the Site investigation and evaluation including assessment & evaluation of different schemes for HVAC, evaluation of credit for old dismantled items, specifically indicate the cost effectiveness & it's working Principles, if required.

Phase 2: Guidance and support in procurement by tendering: -

Formulation and evaluation of enquiry specifications, assisting us for selection of vendor(s). Participation in discussions between CCW AIR and the Vendor(s), Preparation of responses to queries raised by vendor(s). Review of contract.

Phase 3: Review and Validation:-

Review of all building floor drawings ,overall engineering, Review of design, Review of all piping, false ceiling cuttings etc. as per site requirements as it is a running Office at all floor of said building, civil / structural design.


Phase 4: Project completion including Supervisions etc.:-

Monitor the project installation at the site and provide necessary quality assurance, Review of quality plan, standards, certifications & test reports, Review of project milestone / project schedule, Witness performance test for Provisional Acceptance Test, Periodic visits to site to monitor installation progress, quality and adherence to specifications & Highlighting important observations and deviations.

A.1. HVAC DESIGN SERVICES :

1.0 Schematic Design Stage

- 1.1 Consult with Executive Engineer (E), CCW AIR Nagpur to ascertain the requirements of the project.
- 1.2 Study all survey information provided by the Corporation including existing over ground and underground services. Advise the Corporation on necessity for any additional survey, investigations & tests.
- 1.3 Establish design criteria and data, evaluate and recommend suitable systems.
- 1.4 Collaborate and provide all necessary information to the Corporation to facilitate the finalization of Schematic Design.
- 1.5 Develop engineering design and documents and submit the same for the approval by the CCW AIR.


30.09.24

- 1.6 Provide indicative budgetary cost estimate and detailed estimate
- 1.7 Provide all necessary information to Engineer in charge for preparation of tender estimates. Upon receiving approval of the Corporation, prepare drawings, technical specifications and Bill of Quantities in sufficient details for various identified work packages and submit the same to CCW AIR and compile the tender documents.
- 1.8 Develop engineering design brief report and documents and submit the same for its approval

2.0 Approvals Stage:-

- 2.1 Provide technical clarifications as required to assist CCW AIR for preparing NIT/ Tenders & BOQ as required for qualification etc.

3.0 Tendering and Finalization of HVAC vendor/(s).

- 3.1 Assist CCW AIR in qualification of suitable vendors /OEM's.
- 3.2 Upon receiving the proposals from vendors, view/modify/consolidate the design for each service and the same will be reviewed by the CCW AIR.
- 3.3 Provide technical clarification on queries raised during the tender process.
- 3.4 Assist in technical evaluation of tender bids and Recommendations for award of work.

4.0 Execution Stage

- 4.1 Review of drawings and technical data sheets as submitted by the vendor.
- 4.2 Certification of quality of materials and work at various stages to be part of scope of work, Review of mock-ups, material samples and test certificates.
- 4.3 Make required site visits with project managers to ascertain that the execution of work is progressing in general accordance with the design intent and quality standards. Advise CCW AIR / vendors of any remedial actions as required. Review of As-built drawings and "handing over documentation" as prepared by vendors. The document includes test certificates, manuals, pre-commissioning reports, commissioning reports, as built drawings, escalation matrix, makes of material and recommended spare parts.
- 4.4 Issue of Virtual Completion Certificate.


5.0 TECHNICAL SCHEDULE – Engineering design review services on the following discipline

I. HVAC

1. Comfort Cooling requirement and estimation
2. Cooling requirement as per ASHRAE.
3. Equipment's sizing as per the application.
4. Air distribution system for the office premises.
5. Design of HVAC related control circuits
6. Schematic layouts for HVAC system.
7. Schematic layouts for BMS system if required.
8. Incorporating technical details furnished by the CCW AIR's Engineer during the Design development stage.

II. ELECTRICAL

1. Estimation of power requirements.
2. LT distribution system for HVAC.
3. Power distribution system including electrical Panels.
4. Incorporating technical details furnished by the local municipal authority during the design development stage.


30.09.21

Duties / Functions of the consultants :

Taking the Employer's instructions, visiting the sites, preparing sketch designs which shall be in accordance with local governing codes/ standards/ regulations etc., (including carrying out necessary revisions till the sketch designs are finally approved by the CCW AIR), making approximate and detailed estimate of cost,

preparing reports on the scheme so as to enable the CCW AIR to take a decision on the sketch designs. Preparing Consultancy drawings, system design, layout drawings, detailed estimates and all such other particulars as may be necessary for preparation of bill of quantities.


Preparing detailed tender documents for various heads of works, preparation of articles of agreement, special conditions, conditions of contract, specifications, bill of quantities, including detailed analysis of rates based on present market rate, time and progress charts etc.

Recommendation of eligible vendors after e-tendering for award of work based on the assessment report supported by proper analysis of rates with coefficients from an approved Standard Hand Book / market rates of materials and the labour.

Arranging award of works to L1 bidder after e-tendering :

PAYMENT SCHEDULE FOR CONSULTANCY SERVICES

S.NO	Description	% age of payment to be released
1	On submission of preliminary drawings as per scope of work and as per guidelines of Executive Engineer (E), CCW AIR Nagpur	15% of the total Remuneration quoted by the consultant.
2	On submission of detailed estimate of the captioned work for its approval thereof by CCW	15% of the total Remuneration quoted by the consultant
3	On submission of working drawing & preparation of NIT for VRF based air conditioning for All India Radio Studio	25% of the total Remuneration quoted by the consultant
4	During the execution of main works through R/A bills	20% of the total Remuneration quoted by the consultant
5	On completion of main work Including furnishing of drawings after the completion of various works (i.e. VRF based air conditioning system, electrical works and civil works at All India Radio Studio assigned to successful vendor).	25% of the total Remuneration quoted by the consultant


30.09.21
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