

**BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR : HYDERABD-500 093.**

Telephone No.040-23882110

No.CL/01/07-08 Dt.06-07-2007

PROJECTS DEPARTMENT

**NOTICE FOR INVITAION TO CONSULATANTS AND PRACTICING ENGINEERS
FOR PRE-QUALIFYING DISCUSSIONS.**

Pre-bid discussions for Civil, Electrical, Structural, Interior and Landscaping design of a proposed Ultra High Voltage Laboratory (estimate @ 320 Lakhs) will be held at BHEL Corp. R&D on 23-07-2007 between 10.30 Hrs and 12.30 Hrs. at Vikasnagar, Hyderabad.

Interested consultants and practicing engineers are invited to participate in the discussions.

The preliminary details of works are available at web-site www.bhel.com

Interested parties shall intimate their willingness to participate in the discussions. They may please contract the undersigned.

Sd/-
Addl. General Manager (REP)

**CONSULTATION REQUIRED IN THE AREAS OF ARCHITECTURAL, STRUCTURAL, INTERIOR
AND LANDSCAPING FOR CONSTRUCTING ULTRA HIGH VOLTAGE
(UHV) LABORATORY AT BHEL (R&D) LAB COMPLEX.**

Detailed scope of work

The proposed UHV lab consists of two integrated blocks. One is a high roof structural steel building with insulated roof sheeting of height approximately 20 mtr. Width, 20 mtr. Height and length 40 M, in which UHV equipment testing will be carried out. The other is an RCC lab building for office accommodation (part of it of clean room class) of Width 10 mtr. Height 8 mtr., Length 40 mtr., to be constructed, just adjacent to the High Roof building in which mainly testing will be carried out (refer Fig.-1).

I. Drawings and specifications:

1. Preparation of Architectural drawings showing layout plan, plan, section and elevation for Tender purpose including detailing --- 20 copies with original.
2. Preparation of working drawings for construction.
3. Soil testing for
 - a. plasticity, swelling and settlements
 - b. confirmation of safe bearing capacity of soil.
 - c. conductivity
4. **High roof steel building-** preparation of detailed reinforcement drawings for footings, columns, plinth beams, lintels, tie beams, beams, chajjas and machine foundations, etc. as per the design. Preparation of detailed fabrication drawings for steel built-up sections like columns, trusses, crane gantry. Flooring, ground mat, machine foundations etc. Insulated roof sheeting etc.

RCC lab building – Designing of building for ground + 2 floors, preparation of detailed reinforcement drawings for footings, columns, plinth beams, roof beams, roof slab, crane gantry, lintels and chajjas for entire building. Any other detail, as felt necessary by the designer.

5. Preparation of concealed conduit schedule, electrical wiring, layout and locations of electrical panel etc.
6. Preparation of all service drawings (Water supply, Sanitary, Fire fighting and smoke & spark detectors).
7. Preparation of drawings for landscape around the building.
8. Preparation of drawings for side, front and back elevations.
9. Preparation of Interior design with layout details with estimation for interior works.

: 2 :

10. Location of illumination arrangement in the building with specifications.
11. Materials specifications for interior works.
12. Preparation of completion drawings.
13. Revision of drawings required may be made time to time, for each revision 4 copies should be submitted.
14. Landscaping drawings.
15. Bird, vermin, bee-hive prevention planning.

II DESIGNS:

1. Supply of civil/structural design calculations with earthquake (zone identification) resistance – 2 sets along with soft copy.
2. Supply of computer aided design calculations - 2 sets along with soft copy.

III INSPECTION AND SITE SUPERVISION:

1. Deputation of site supervision staff for day – to –day reporting to BHEL Officials.
2. Deputation of Structural Engineers the site as and when required.

IV PAYMENTS:

Payments will be made based on the approved total cost of the building (Civil/Structural works + Interiors + Electrical works = Rs.318.00 Lakhs approximately).

PAYMENT TERMS:

- Payment will be made in four stages on financially concurred total cost of the building
1. 25% after giving plans, elevations and structural design including detailing.
 2. 25% after laying roof slabs of lab building.
 3. 25% after completion of high roof parabolic building.
 4. 25% after completion of all civil works including Interiors.

Cont.3/-

: 3 :

The total consultancy agreement will be for a period of 24 months.

Tender drawings – 20 copies with original.

All construction drawings – 10 copies.

All revisions – 4 copies minimum at each revision.

All the drawings drawn in CAD and blueprint to be supplied to BHEL (R&D). CAD / soft copies should be furnished on CD.