

## **SECTION -1**

### **SCOPE & SPECIFIC TECHNICAL REQUIREMENT**

#### **1. INTRODUCTION**

- 1.1 The purpose of this specification is to specify all details required by a Soil Consultant for:
- 1.2 Conducting soil investigation required in various substation/switchyard projects of various Customers like NTPC, POWERGRID, SEBs, etc.
- 1.3 Quoting their most competitive rates for items indicated in Annexure I of this specification for entering into a rate contract with BHEL for 2 years.

#### **2. SCOPE**

- 2.1 The scope of work under this specification is conducting of soil investigation required in various substation/switchyard projects of various Customers like NTPC, POWERGRID, SEBs, etc.
- 2.2 The soil investigation may be required to be conducted in any part of India.
- 2.3 The soil investigation may be required to be conducted during the following stages of any project:
  - (i) **Tender Stage:** This means the stage before which BHEL submits his offer against any transmission project tender. At this stage, the basic purpose is to provide the estimator with preliminary soil data to work out the civil quantities & cost more realistically.
  - (ii) **Contract Stage:** This means the stage when BHEL is awarded the work of turnkey execution of any project. At this stage, apart from being obligatory on part of BHEL to provide & get the soil investigation report approved from the Customer, the basic purpose is to provide the civil designer with sufficiently accurate information, both general & specific, about the substrata profile and relevant soil and rock parameters at site on the basis of which he can design the foundation of various structures rationally.
- 2.4 This specification covers all the work required for soil investigation and preparation of a detailed report. The work shall include mobilization of necessary equipment, providing necessary engineering supervision and technical personnel, skilled and unskilled labour, etc. as required to carry out the entire field as well as laboratory investigation, analysis and interpretation of data collected and preparation of a detailed soil report including specific recommendations for the type of foundations and the safe bearing capacity for different sizes of foundations at different founding strata for the various structures of the substation.
- 2.5 The Bidder shall make his own arrangement for locating the coordinates and various test positions in the field (including clearance of site at the location of test positions, if necessary) all as per the information supplied to him and also for determining the

reduced levels of these locations. The test locations shall be furnished by the Engineering Group at New Delhi.

- 2.6 The Bidder shall make his own arrangement for water and electricity (if required) and arrangement for putting up his man & material.
- 2.7 All the field & laboratory data shall be recorded in the proformas recommended in IS Codes.

### **3. SPECIFIC TECHNICAL REQUIREMENT**

- 3.1 The specific technical requirements shall be as per Standard Technical Specification. (Refer Section 2 ).
- 3.2 All works shall be carried out as per latest edition of the corresponding I.S. Codes.
- 3.3 No extra work shall be carried out without prior approval.