

## **SPECIFICATION FOR CONDUCTING ELECTRICAL RESISTIVITY TEST OF SOIL (ERT)**

- 1.0 TEST:** The specification covers all work required for detailed Electrical Resistivity measurement and preparation for detailed report. The work includes mobilization of necessary equipment, providing necessary engineering supervision and technical personnel, skilled and unskilled labour etc. for detailed Electrical Resistivity measurement and tests, analysis and interpretation of data and results, preparation of detailed report. The bidder shall make his own arrangements for locating the co-ordinates and various test positions in the field as per the information supplied to him.
- 2.0 METHOD:** The test shall be conducted to determine the Electrical Resistivity of soil required for designing safety grounding system for the entire station area. The specifications for the equipment and other accessories required for performing Electrical Resistivity Test, the test procedure and reporting of field observations shall conform to IS : 3043. The test shall be done using Wenner's four electrode method as specified in IS : 1892, Appendix B-2. Unless otherwise specified at each location, the test shall be conducted along two perpendicular lines parallel to the co-ordinate axis. On each line a minimum of 8 to 10 readings shall be taken by changing the spacing of the electrode from an initial small value upto a distance of 10 m.
- Note:** The test shall be done at about 8 points (with +/- 50% variation) at each substation. The test locations shall be furnished after award of contract.