



# REHOBOTH CIVIL TESTING LABORATORY PVT LTD

*CMDA / DTCP Registered Professionals*

*Geo-Technical Engineer*

*Structural Engineer*

*Quality Auditor*

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# SPECIALIZED TESTING SERVICES

## PLATE LOAD TEST

- **Safe Bearing Capacity / K Value-Modulus of Subgrade**

## PILE LOAD TEST

- **Lateral Pile / Pullout Pile / Vertical Pile**

## SOIL INVESTIGATION TEST

- **Standard Penetration / Earth Resistivity / Sand Replacement / Core Cut / CBR / DCPT**

## NON DESTRUCTIVE TEST

- **Ultrasonic Pulse Velocity / Rebound Hammer / Pile Integrity / Half Cell Potential**

## MATERIAL TEST

- **Concrete –Fresh, Hardened / Aggregate – Fine, Coarse / Anchor Bolt- 8 mm to 32 mm**

## STRUCTURAL STABILITY

- **Buildings / Factory / Bridges**



# CORE SERVICES SECTORS-PAN INDIA

- Warehouse Projects
- Thermal Power Plant
- Solar Power Plant
- Wind mill Power Plant Foundation
- Transmission Line
- Harbor /Port Construction
- Sewage Treatment Plant
- Road Works, Pavement Testing etc
- Industrial Power Plants.
- Factory Projects, Commercial Building
- High Rise Buildings Residential Buildings
- Steel Power Plants



# PRESTIGIOUS CLIENTS

 <p><b>addwatt</b> powering your investment</p>	 <p><b>ADITYA BIRLA</b> <b>RENEWABLES</b></p>	 <p><b>BLUE BRIGHT ENERGY</b></p>	 <p><b>CleanMax™</b> POWERING SUSTAINABILITY</p>	 <p><b>EAGLE</b> Renewable Energy Solutions</p>	
 <p><b>oorjan</b></p>	 <p><b>PIONEER</b> Pioneer Energy Services</p>	 <p><b>Prozeal</b> GREEN ENERGY India's Most Bankable Green Energy Company</p>	 <p><b>Oriano</b> Your Solar Partner</p>	 <p><b>RAYS</b> POWER INFRA</p>	
 <p><b>Relyon Solar</b></p>	 <p><b>SIEMENS Gamesa</b> RENEWABLE ENERGY</p>	 <p><b>SOLAR PACK</b></p>	 <p><b>susten</b> BY mahindra</p>	 <p><b>SOLOM</b></p>	
 <p><b>mahindra</b> LOGISTICS</p>	 <p><b>ascendas</b> FIRSTSPACE A CapitaLand-Firstspace Joint Venture</p>	 <p><b>DP WORLD</b></p>	 <p><b>HIRANANDANI</b> INDUSTRIAL PARKS</p>	 <p><b>NDR</b> REDEFINING WAREHOUSING</p>	 <p><b>DIRA FLOOR</b> CONCRETE SOLUTIONS BUILT STRONG! LASTS LONG!</p>
 <p><b>L&amp;T Hydrocarbon Engineering</b></p>	 <p><b>OCEAN</b> DELIVERING DREAMS O&amp;A CONSTRUCTION   INFRA   POWER   RETAIL</p>	 <p><b>KEC</b> KEC INTERNATIONAL LIMITED</p>	 <p><b>HCC</b></p>	 <p><b>TATA</b> TATA PROJECTS LIMITED</p>	



# PLATE LOAD TEST – SBC



*The plate load test is to determine the ultimate bearing capacity of the soil and the probable settlement under a given load – IS 1888*



# PLATE LOAD TEST- K VALUE



*Modulus of Subgrade Reaction is defined as the pressure per unit deformation of the subgrade at specific pressure or deformation- IS 9214*



# PILE LOAD TEST- VERTICAL



*Compression load is applied to the pile top by means of a hydraulic jack using Truck to provide reaction and the settlement is recorded by suitably positioned dial gauges – IS 2911 (IV)*



# PILE LOAD TEST- LATERAL



*The test is carried out by introducing a hydraulic jack with gauge between two piles or pile groups under test or the reaction may be suitably obtained otherwise – IS 2911 (IV)*



# PILE LOAD TEST- PULLOUT



*The methodology adopted for Pile Load Test by Pull Out method is in such a way that the hydraulic jack is made to rest on rolled steel joist resting on two supports on the ground – IS 2911 (IV)*



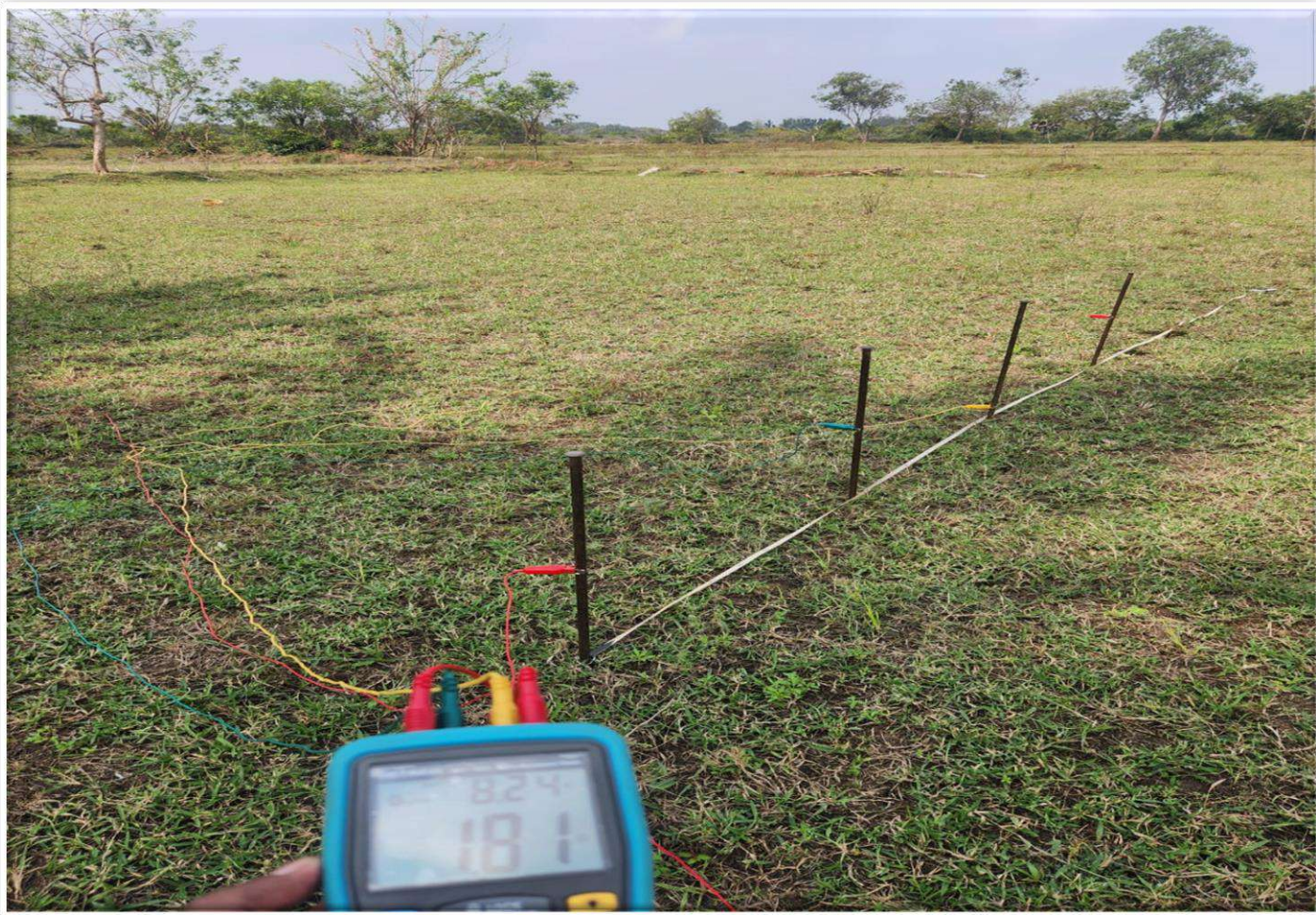
# SOIL INVESTIGATION – SPT



*The standard penetration test is an in-situ dynamic penetration test designed to provide information on the geotechnical engineering properties - IS 2131*



# SOIL INVESTIGATION – ERT



*A Wenner probe test is a geotechnical investigation method used to determine the electrical resistivity of the soil - IS 15736*

# SOIL INVESTIGATION – SRT



*Sand replacement method is used to measure the in-situ density of natural or compacted soils using sand pouring cylinders- IS 2720 (28)*



# SOIL INVESTIGATION – CORE CUTTING



*The core cutter method is a test used to determine the in-situ dry density of soil - IS 2720 (29)*



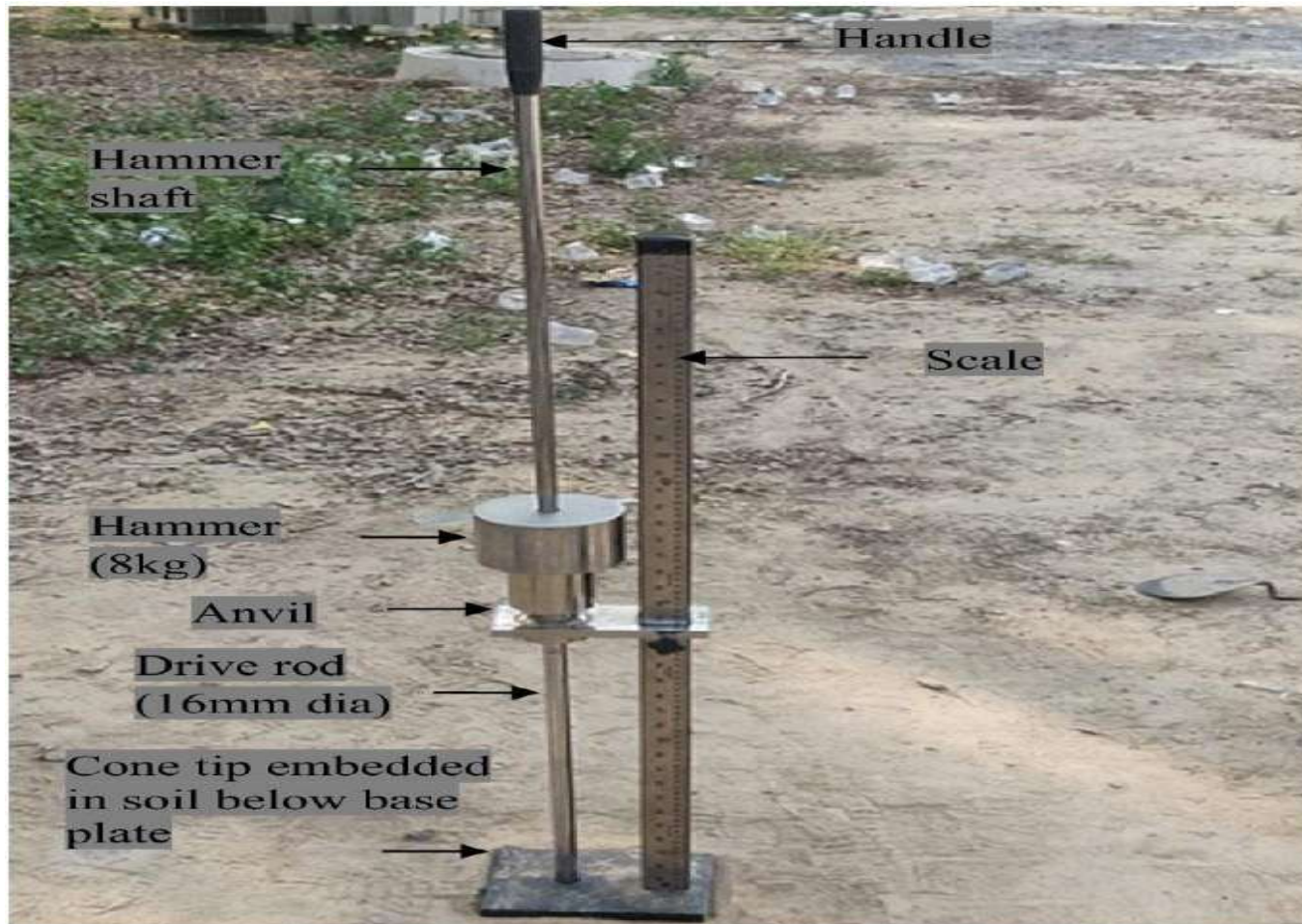
# SOIL INVESTIGATION – CBR



*The California Bearing Ratio (CBR) is a measure of the strength of the subgrade of a road or other paved area - IS 2720 (31)*



# SOIL INVESTIGATION – DCPT



*The Dynamic Cone Penetration Test provides a measure of a material's in-situ resistance to penetration-ASTM 6951*

# NON-DESTRUCTIVE TEST - UPV



*An ultrasonic pulse velocity test is an in-situ, non destructive test to check the quality of concrete and natural rocks - IS 13311*



# NON-DESTRUCTIVE TEST - RH



*Rebound hammer or concrete hammer test, is a device to measure the elastic properties or strength of concrete - IS 13311(2)*



# NON-DESTRUCTIVE TEST - PIT



*Low strain impact integrity test, is a non-destructive test method for the evaluation of pile quality, and integrity– IS 14893*



# NON-DESTRUCTIVE TEST – HALF CELL



*This method may be used to indicate the corrosion activity associated with steel embedded in concrete.– IS 516 (V)*



# MATERIAL TEST – CONCRETE



*The compressive strength of the concrete cube test provides an idea about all the characteristics of concrete - IS 456*



# MATERIAL TEST – AGGREGATE



*Test of aggregates is important because the quality of an aggregate determines the quality of the concrete being used in a specific project – IS 2386*



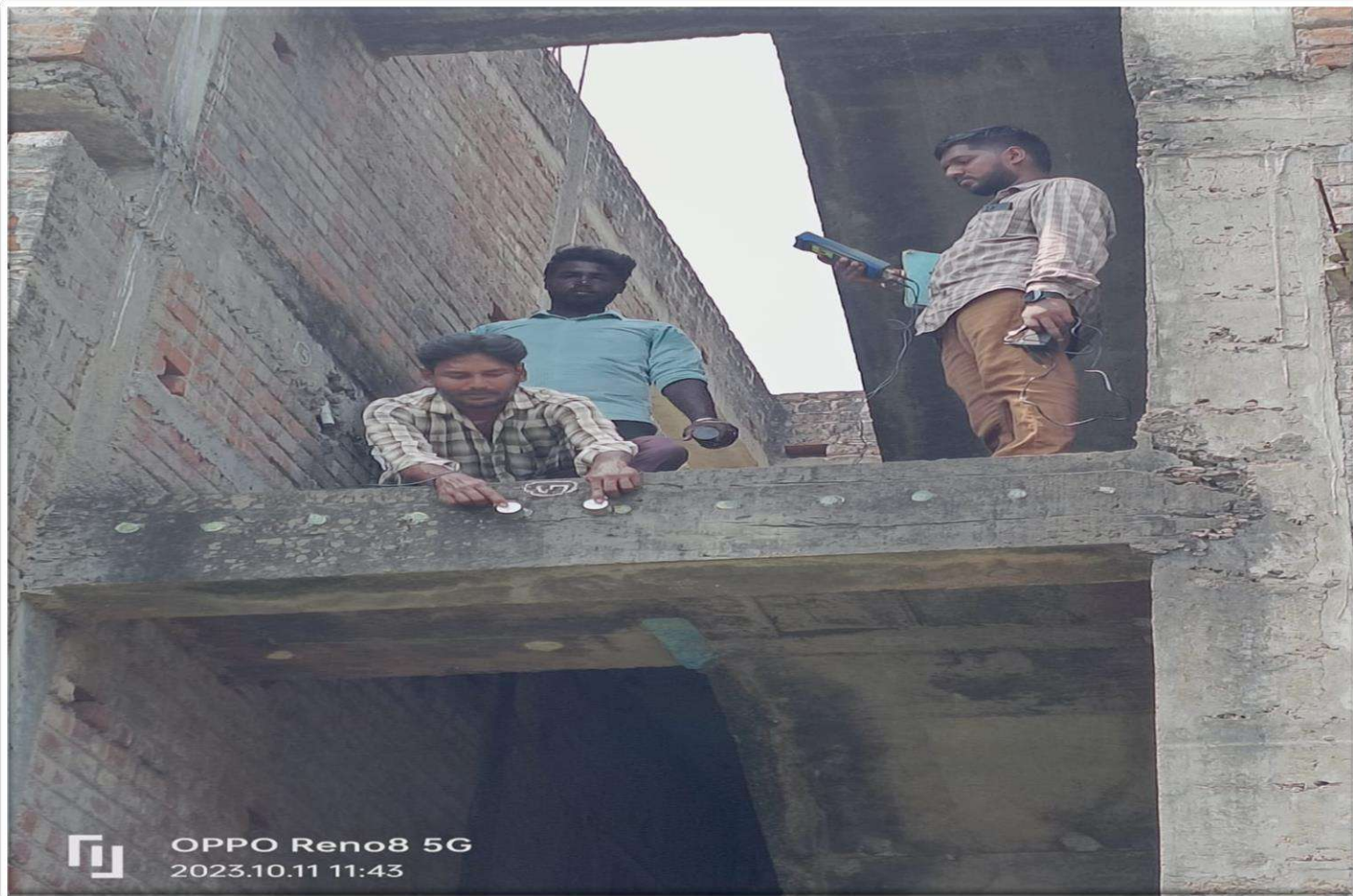
# MATERIAL TEST – ANCHOR BOLT



*The aim of the anchor pull-out tests is to determine the load-bearing capacity of the selected washer anchor in the project-specific fastening substrate –IS 11309*



# STRUCTURAL STABILITY– BUILDING



*Structural analysis by using STAAD Pro a Structural Analysis software was used and checked the Structural design stability of Existing Building – IS 456*



# STRUCTURAL STABILITY – FACTORY



*Structural stability of the present strength of concrete and we have worked out a system for checking the stability of the structure – IS 875*



# STRUCTURAL STABILITY – BRIDGES



*The load testing is used to check whether maximum deflection and percentage recovery are within permissible limits or not IRC SP :51*