

#### **INTRODUCTION:**

- **★ We introduce ourselves from M/s. Rehoboth Civil Testing Laboratory Pvt Ltd** is a leading Soil Testing & Materials Testing Laboratory Since 2016. It is established by **Mr.R.Balasubramanian**, **Managing Director** by God's Grace.
- ❖ It is the passion and desire to drive in the area of Civil Testing Field that has enabled him to launch the Laboratory. It is a reputed and renowned Laboratory in the field of Civil Engineering Testing Centre for all Building Materials, Quality Assurance and Quality Consultancy works on Residential & Commercial Buildings/Factory / Industrial / Infrastructures/Road Works.
- One of the pioneers in setting up Bench mark in the area of Soil Testing for Foundation Recommendation, Geo Technical Investigation for Residential / Commercial / Factory Projects/Industrial, Soil Related Test for all Categories.

- RCTPL is a specialized testing centre, offering Services in Soil Investigation, Earth Resistivity Test / Plate Load Test/Onsite Soil Test Lab / Concrete Design Mix / Cement and Fly ash Test / Road Works for Commercial / Highway / Structural Assessment thru NDT etc. Laboratory is equipped with all facilities.
- ❖ We undertake both in house testing, onsite testing and consultancy activities with dedicated technical team of engineers and technicians.

#### VISION:

- ★ To give Glory to God in the first place through all our Testing services.
- To be the Universal leader in Civil QA/QC Laboratory Testing Field.
- To develop our Laboratory in India and International markets.
- ❖ To create a peaceful atmosphere and great opportunity to work and grow professionally.

#### **MISSION:**

- ❖ To satisfy the customer requirements in Material Testing, Soil Testing and Concrete Testing services with Consistency and reliability.
- To ensure excellent quality of test results to the customer in the area of Building Material Test, Soil Test, NDT, Fresh and Hardened Concrete Oriented Researches.

#### **QUALITY POLICY:**

Lab is committed for professional services through active involvement of all personnel in the company. It is committed to produce technically convincing results and quality of operations in its high standard procedure to produce results.

#### MANAGING DIRECTOR PROFILE:

- Director, Head- Quality Control & Materials Testing Department, having 18 vast years of experience in the Quality Control and Quality Assurance in Construction sector as well as Concrete and Soil Lab.
- ➤ He has been with **Building Technology Centre**, **Anna University** Lab in Charge as well as administration. His well known expertise is in the area of Concrete Mix design with Chemical and Mineral Admixtures.
- ➤ He had been involved in lot of research activities in the various Chemical companies such as FOSROC, BASF, CeraChem and Mc Bauchemie during his research studies.

- ➢ He worked with M/s.Emas Engineers and Contractors and M/s. Simplex Infrastructures Ltd as Senior Quality Control Engineers for Mega Projects.
- ➤ He studied and worked under the guidance of **Dr.A.R.Santhakumar**, Former Dean of Civil Engineering, Anna University and Emeritus Professor, IIT.
- ➢ He had a very good experience in abroad at Afghanistan, U.S Army Base at Kabul. He worked with the cold weather concrete, executed lot of design mixes.

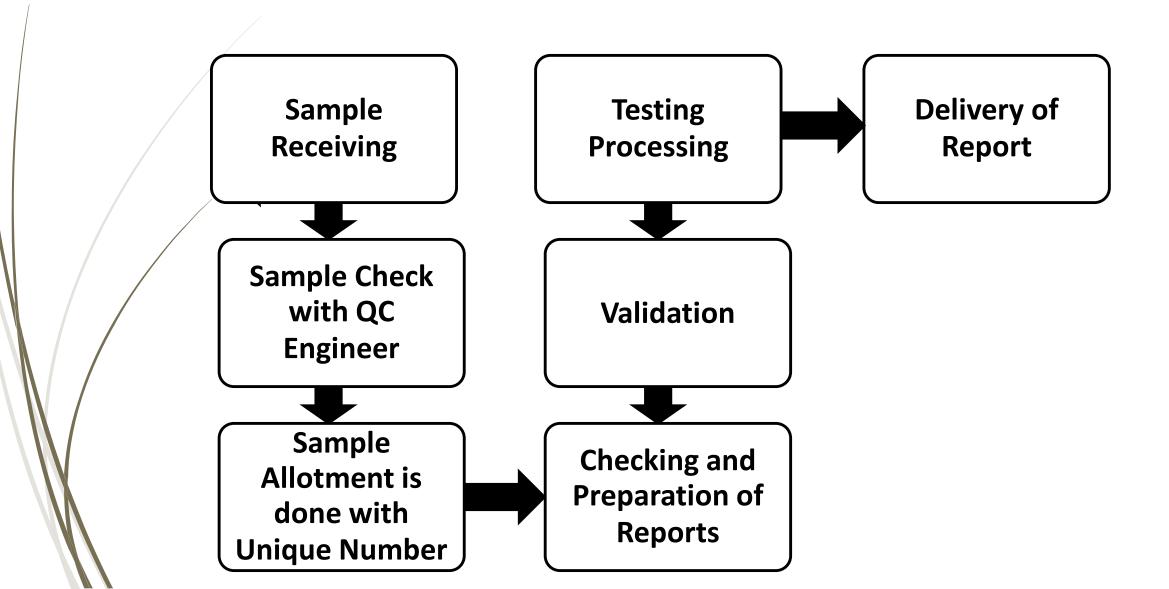
#### Expertise's are has follows:

- ✓ Conducting numerous Soil Investigation Works across Chennai and Tamilnadu for Commercial/Factory Building /Residential /Power Plants etc.
- ✓ He has been involved in Soil Testing, Geo Technical Investigation, Road Works, GSM, WMM, WBM, Soil Stabilization Treatment Analysis, Earth Resistivity Test etc.
- ✓ Concrete Design Mix & Consultancy work on Road and Soil Testing for major Factory Projects, Industrial and commercial building, Power Plants, Windmill Foundation, etc.
- ✓ NDT Rebound Hammer, UPV, Core, Carbonation Test on Concrete Structures, Old Building Assessment via conducting NDT.

#### **EQUIPMENTS:**

- Laboratory is well maintained and equipped with necessary apparatus to carry out all testing of soil spt / soil compaction / gsb /wmm / building materials / concrete, cement & fly ash / aggregate test/ NDT(rebound hammer, UPV, concrete core etc.). All equipment's are calibrated according to the IS requirements.
- ➤ Our team is well trained to handle laboratory apparatus to provide the consistent and reliable results.

#### **Process:**



# GEO TECHNICAL INVESTIGATION TESTING SERVICES

### 1. OUR TECHNICAL SERVICES FOR GEO TECHNICAL WORKS FOR FOLLOWING TESTING:

- Geo Technical Investigation Services Provided for Foundation recommendation in Chennai, Tamil Nadu and Across India.
- ➤ Geo Technical Consultants services offered for Embankment Construction, Ground Improvement Techniques, Soil Strengthening by employing various testing methods.
- ➤ Plate Load Test /Cyclic Plate Load Test for Settlement and Soil SBC Value.
- ➤ Shear Test Parameters such as C, Pi Value of Soil, Cohesion Parameters, Permeability Test on Soil, Direct Shear, Tri Axial Shear, Soil Classification etc.
- ➤ Soil Core Cutting test, Sand Replacement Test for Finding out the % of Compaction at Field.

- > Test Pit Excavation analysis, Sub Soil Conditions for Transmission Line Structures, Existing Surface and Pavement Analysis by Core Cutting.
- Proctor Density Test for Maximum Dry Density & Optimum Moisture Content.
- California Bearing Ratio (CBR) Test, Unconfined Compressive Strength Test (UCC), Swell Pressure Test etc.
- ➤ Modulus of Sub grade Reaction (k) for Soil.
- ➤ Soil properties Test such as Sieve Analysis, Specific Gravity, Free Swell Index, Atterberg limits etc.
- ➤ Earth Resistivity Test for Solar Power Plant /Wind Power Plant /Thermal Power Plants Structure etc.
- > Chemical Properties on Soil Samples (Cl, Sulphate, Ph,).

#### 2. ONSITE CONSULTANCY UNDERTAKEN:

- Onsite Laboratory Set up for Quality Consultancy Works on Soil /Compaction Test / Plate Load test, etc across India.
- Quality Inspection Plan and Testing Program for Major Project across India.
- Setting up Materials testing Lab for RMC Plants, QA /QC Monitoring Activities.
- ➤ Consultancy Services on Preparation of DPR (Detailed Projects Report) for NHAI Road Projects, Industrial Structures, Preliminary Site Investigation, Testing of Soil Samples, Materials, Geotech Consultants, etc.
- ➤ Civil Testing Lab setup for Solar Projects on Pan India Basis for Major Solar Projects across India, Wind Power Projects, Industrial Structures, Road Projects, Power Plant Structures etc.

## 3. GEO TECHNICAL INVESTIGATION SERVICES OFFERED FOR THE FOLLOWING FIELDS:

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

# ONSITE TESTING, LABORATORY AND CONSULTANCY SERVICES

#### 1. SOIL TEST/SPT/GEOTECHNICAL INVESTIGATION:

- Soil SBC(Safe Bearing Capacity)/SPT/Geo Technical Investigation for foundation recommendation in Chennai and Tamilnadu.
- ➤ Soil Core Cutting test, Sand Replacement Test for Finding out the % of Compaction.
- ➤ Vane Shear Test, Tri Axial Shear Test, Direct Shear test etc.
- Proctor Density Test for Maximum Dry Density.
- > CBR Test and Unconfined Compressive Strength Test (UCC).
- ➤ Soil properties Test such as Sieve Analysis, Specific Gravity, Free Swell Index, Atterberg limits etc.

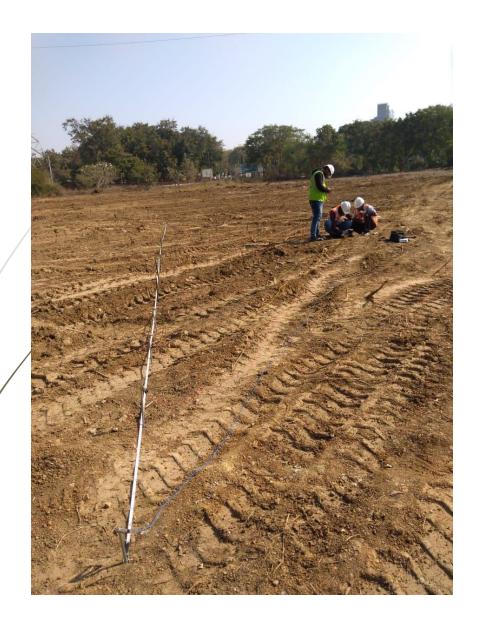
- 2. PLATE LOAD TEST/CYCLIC PLATE LOAD TEST IS UNDERTAKEN.
- 3. PULL OUT TEST FOR FINDING BOND STRENGTH BETWEETN CONCRETE AND REBAR.
- 4. CONCRETE PULL OUT TEST FOR 8 MM TO 32MM DIA FOR MAXIMUM OF ANY LOAD CAPACITY CAN BE CARRIED OUT FOR MAJOR INFRASTRUCTURE FOR BOND STRENGTH BETWEEN STEEL AND CONCRETE.
- 5. APPLICATION SUCH AS
- Railway Track works.
- Embankment Construction,
- Bridge Construction.
- Tunneling Construction, Road Works.
- Commercial and Industrial Building. etc.
- 6. EARTH RESISTIVITY TEST FOR POWER PLANT /SOLAR POWER PROJECT, ETC.

# 7. WE PROVIDE PILE LOAD TESTING SERVICES ACROSS INDIA:

- Vertical Compression Test on Pile Structure/Pile Foundation for Solar Power Plant / Windmill Plant/ Thermal Power Plant Structure / Industries / Factories etc.
- Pull out Test on Pile Structure/Pile Foundation for Solar Power Plant / Windmill Plant/ Thermal Power Plant Structure / Industries / Factories etc.
- Lateral Load Test on Pile Structure/Pile Foundation for Solar Power Plant / Windmill Plant/ Thermal Power Plant Structure / Industries / Factories etc.

#### Road Work Testing:

- a. GSB Properties, WMM Properties and WBM Properties.
- b. Existing Pavement Investigation thru Test Pits for Road Works.
- c. Soil Compaction, Onsite Lab Set up for Quality Testing Consultancy.
- d. Borrow Area Soil Sample Analysis.
- e. Dense Bitumen Macadam Thickness (DBM), DBM Bulk Density (gm/cc), Bitumen Thickness. Bitumen Bulk Density (gm/cc) by taking Core, Gradation after extraction of Core.



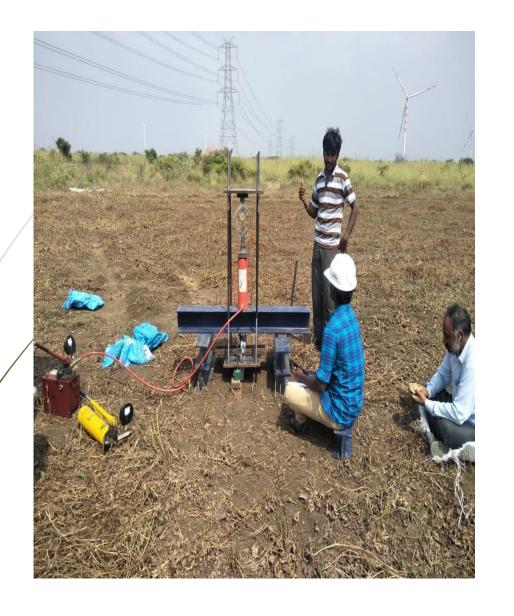














#### 8. NDT TEST (NON DESTRUCTIVE TESTING):

- ➤ Rebound Hammer Test for assessing the Comp. Strength of existing concrete structure.
- Ultrasonic Pulse Velocity Test for assessing the integrity of existing concrete structure.
- > Pile Integrity Test (PIT) for assessing the length, integrity of Pile etc.
- > Reinforcement Scanning for Checking the Cover depth in concrete.
- > Carbonation Test on Concrete Core Test.

# MATERIALS TEST CATEGORY

#### 1. CONCRETE TESTING / AGGREGATE TESTING:

- Concrete Design Mix for all Grade of Concrete, Paver Blocks, Solid Blocks.
- Concrete Core Test along with Extraction, Concrete Cube and SlumpTest.
- > Concrete Cube Test by ACT Method i.e. ( Accelerated Curing Test ).
- ➤ Aggregate Testing including Physical and Chemical properties.

# 2. CEMENT TEST / FLY ASH TESTING / MINERAL / CHEMICAL ADMIXTURES:

- Physical and Chemical Testing of Mineral Admixtures such as Fly ash, GGBS, Filling materials for Concrete etc.
- Chemical Admixture for Uniformity Tests and Requirements.
- > Physical Properties on Mineral admixtures and Chemical Admixtures.

#### 3. BENTONITE POWDER TESTING:

➤ Sieve Analysis, Specific Gravity, Free Swell Index, Atterberg limits, marsh cone funnel test etc.

#### 4. BRICKS TEST / SOLID BLOCKS / PAVER BLOCKS:

- Red Burnt Clay bricks / Fly ash bricks (C.S, W.A, Efflorescence, Dimension).
- > Solid blocks / Hollow Blocks / Paver Blocks (Comp. Strength, W.A, BD).
- > Drying Shrinkage, Moisture Movement etc.
- ➤ AAC (Aerated concrete blocks) / CC (Cellular Concrete Products) Blocks Comp. Strength, Density).

#### 5. TILES TEST:

- Dimension / Squareness, Rectangularity Test.
- Water Absorption.
- > Flexural Strength.
- > Breaking Strength.

# QA/QC CONSULTANCY WORKS /ONSITE TESTING SERVICES

- We undertake Project Management Consultancy (PMC) for QA/QC, Onsite Laboratory (Soil and Concrete) Testing for all projects. It will be operated by us to the specific requirements.
- Quality Assurance /Quality Control (QC) Consultancy for Monitoring Site cum QC activities day by day and testing of Building materials, assessing the site checking for Major Infrastructures Projects /Commercial /Residential /Industrial /Road Works etc
- ➤ QA/QC Consultancy on Testing of Road Projects Works such as Soil Compaction test, Soil Analysis test, Pavement Pit Excavation to analysis the existing properties of soil, aggregate etc. Borrow Area sample analysis, suitability of Backfilling, Concrete Core and Soil Core Test etc. Collection and Sampling of Testing of materials and pavement investigation thru Test Pits.

- ➤ Soil stabilization of existing clay soil cum by adding limes, fly ash, Stabilization of Existing Soils / Soil Treatments thru taking Soil Compaction Test and Analysis of Soil Properties such as CBR /UCC Test.
- > Structural assessment for Old and New Building according to specific and code requirements thru NDT such as Rebound Hammer, UPV Test, Rebar Locator for scanning the reinforcement placement.
- Government Projects undertaken for Testing of Soil SPT, Concrete Cube, Materials Test, NDT etc.
- Research Projects in Latest Development of Concrete additives such as Mineral and Chemical Admixtures in Concrete etc. B.E/B.Tech(Civil) and M.E /M.Tech (Civil), students Projects are undertaken along with Technical support.



#### CERTIFICATE

This Certificate is awarded to the Quality Management System of

M/s Rehoboth Civil Testing Laboratory Pvt. Ltd.

Plot No. - 10/752, VGP Babu Nagar, 3rd Main Road, Medavakkam - 600100 (Chennai) India

has been audited by the MSYSCERT and found to be in compliance with the requirements of the standard

ISO 9001 : 2015

This certificate is valid for the following scope

Geo Technical Investigation, Building Materials Testing, Concrete Test, Soil Test, NDT (Non Destructing Test), Training on Building Materials Testing, QA(Quality Assurance)/ QC (Quality Control) Consultancy Works in terms of Civil Engineering Testing, Onsite Test & Allied Services

CERTIFICATE NO. : MSYS/1715/16
DATE OF CERTIFICATION : 20/07/2016
DATE OF EXPIRY : 19/07/2019







- This Certificate is intellectual Property of Mayscert and can be maintained through surveillance and renewal audits.

  If you can not maintain the Certification, this Certificate shall be returned to Mayscert.
- You can verify the authenticity of this certificate on Certificate confirm at www.msyscert.co.in

#### **OFFICE ADDRESS:**

M/s. Rehoboth Civil Testing Laboratory Pvt Ltd

(SOIL TEST, PLT, PULLOUT TEST, NDT, QA/QC CONSULTANCY)

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Medavakkam, Chennai – 600 100

Tamilnadu, India; Land Mark: Near EB Office

Email: <a href="mailto:rctpl2016@gmail.com">rctpl2016@gmail.com</a> : <a href="mailto:admin@rctpl.co.in">admin@rctpl.co.in</a>

Technical Query: <a href="mailto:qctechnical2016@gmail.com">qctechnical2016@gmail.com</a>

## <u>For Soil Testing/Materials/Concrete / NDT related:</u> Contact:

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+ 91 97908 11996 - Executive Coordinator

+91 91763 71857 - Testing & Rates Enquiry

# THANK YOU