

# JOSMAR CONSULTING ENGINEERS

**NABL ACCREDITED LABORATORY**



When it comes to stability,  
We don't compromise

Your **foundation** is our  
Priority

**Josmar Consulting Engineers is a multi-disciplinary engineering firm that provides various engineering services to clients across multiple industries. With a team of experienced engineers and experts, we are committed to delivering high-quality services that exceed our client expectations.**

# About us

Josmar Consulting Engineers was established in the year 2007 by a team of experienced Engineers and Experts.

It was founded by **Dr.S.Ravichandran M.E., Ph.D., CEO** having professional experience of over three decades in the field of Geotechnical Engineering, Geological Studies, Ground Improvement, Geo-Physical, Geo-Environmental studies and Survey.

Josmar has completed over 5000 Geotechnical investigation works, including evaluations, assessments and ground improvement/underpinning. The projects handled cover skyscrapers to offshore construction projects. We've also worked for thousands of geotechnical projects, including government, semi-government and private clients to meet their technical and economic requirements in almost all types of soil and rock conditions.

Josmar has been involved in various international survey projects and Geotechnical (Onshore and Offshore) projects. Josmar team has expertise with the latest Survey technologies such as **LiDAR, Drone, Drone LiDAR, DGPS and GPR**. We have conducted numerous underground utility surveys using **GPR, Magnetic cable detectors as well as Magneto Telluric methods**. **In addition to that our GPR Team is highly experienced in underground cavity investigations.**

We at Josmar Consulting Engineers strive to provide our clients with economical recommendations, whenever possible. For example, for a soil condition which requires deep foundation as per calculations, we can provide innovative alternate solutions using a combination of shallow foundation & ground improvements thus saving time & money for our clients.

Josmar Consulting Engineers has an extensive track record of successfully delivering thousands of geotechnical investigation projects and Survey projects for a diverse range of clients, including MRTS (Railway), Bharat Heavy Electricals Ltd, Chennai Metro Rail (CMRL), Southern Railways, ITD Cementation Ltd, Reliance Industries, CPWD, PWD-West Bengal, CLRI as well as multiple municipal clients such as architects, Engineers, developers, owners, contractors and State Housing Board. In addition, Josmar Consulting Engineers has provided their services to Port Trust and Central government works and has completed several multi-story building projects in Chennai and Maldives.

Josmar Geotech Laboratory is NABL accredited and is fully aware of its responsibility in quality control and assessment. **It has accordingly established facilities following Indian Standards, satisfying the prerequisites of NABL Accreditation under ISO 9001-2015 & ISO-IEC 17025:2017.** It is worth noting that the laboratory is NABL accredited, indicating its commitment to maintaining high quality standards.

**Josmar has established its footprint in various other countries such as Oman and Zambia.**

# Certifications and Registrations

- **NABL Accredited Laboratory**
- **ISO 9001-2015**
- **TWAD Class-II**
- **CMDA & DTCP Registered Engineers**
- **Empaneled in HITES-Kerala**
- **Empaneled in various Government, Semi-Government and Private Organization's**
- **Registered in MSME**



## Our Vision

Our company aims to be a trusted and proficient partner for delivering top-notch geotechnical Investigations, surveys and special studies. We strive to provide comprehensive solutions for various infrastructure development projects, offering cost-effective consulting services without compromising on quality.

## Our Approach

At Josmar Consulting Engineers, we collaborate on all our projects with expert opinions. We work closely with our clients to understand their unique needs and challenges and develop customized solutions that meet their requirements. Our team members are always available to answer any questions and update project progress, ensuring our clients are informed throughout the project kept.

## Our Mission

At Josmar Consulting Engineers, we deliver high-quality services that exceed our client's expectations. Our mission is to provide our clients with innovative engineering solutions that help them achieve their goals. We are committed to building long-lasting relationships with our clients based on trust, integrity and mutual respect.

# Major services

At Josmar Consulting Engineers, we offer the following primary services.



## Geotechnical

- **Geotechnical Investigation – Onshore and Offshore**
- **Standard Penetration Test**
- **Drilling, sampling and field testing in soil and rock**
- **Trial pits**
- **Plate load test (for assessment of flooring capacity & Soil bearing Capacity)**
- **Earth resistivity test**
- **Field density test**
- **Thermal resistivity test**
- **Block vibration test**
- **Cross-hole and Down-hole seismic test**
- **Pressure meter test**
- **Static cone penetration test**
- **Dynamic cone penetration test**
- **Field & Lab vane shear test**
- **Field permeability test**
- **Field & Lab density Test by core cutter method**
- **Field California Bearing Ratio (CBR)**
- **Water wells drilling**
- **Ground Improvement Solutions & Execution**

# Geotechnical Laboratory Testing

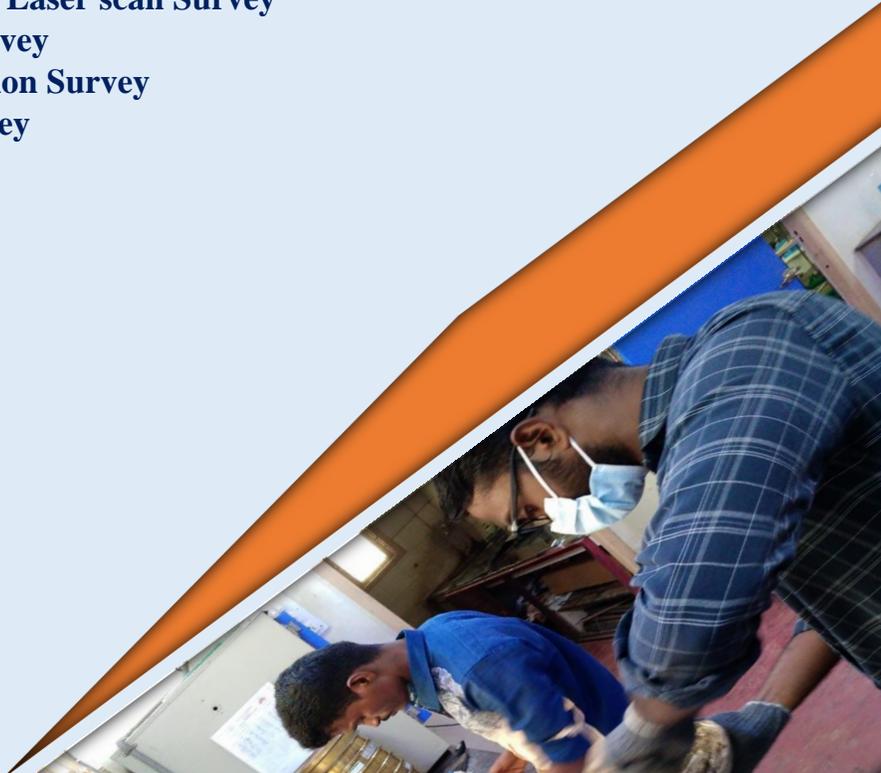
- Soil classification (Sieve Analysis & Hydrometer)
- Atterberg Limits
- Specific Gravity test
- Free swell Index
- Consolidation Test
- Direct Shear Test
- Triaxial Shear Test
- Unconfined Compressive test
- Proctor Compaction Test ( Light & Heavy compaction )
- Point Load test (For Rock)
- Water absorption (For Rock)
- Petrographic examination
- Sieve Analysis-Fine Aggregate and Coarse Aggregate
- Bricks/Blocks – Compression Test, Water absorption test



## Land & Offshore Surveys

- Drone Survey (LiDAR & Photogrammetry)
- Bathymetric Survey
- LIDAR or Laser scan Survey
- DGPS Survey
- Total Station Survey
- GPR Survey

Trust our **expertise**,  
Build with **confidence**



# Pile Testing Services

- **Pile Integrity Testing**
- **Vertical Static Pile Load Test using Kentledge method**
- **Pullout & Lateral load test on piles**
- **Vertical Static Pile Load Test using Anchor method**
- **Dynamic Pile Load Test**

**Geotechnical excellence** for  
your peace of mind

## NDT & Others services for Existing Buildings

- **Ultrasonic Pulse Velocity test**
- **Concrete Core test**
- **Rebound hammer test**
- **Half – cell potential test**
- **Rebar scannings**
- **Strength Evaluation of existing buildings & Submission of Reports**
- **Building Repair & Rehabilitation works**
- **Structural & Architectural Design**
- **Soil Stabilization for existing foundation**



# Major Projects in India

## Geotechnical Investigation:

### Chennai Metro Rail work

- Drilling 550 Boreholes, Collecting samples and submission of Geotechnical report for Taramani road Sholinganallur in corridor 3 of Phase-II for Chennai Metro Rail Limited (CMRL)



### National Highways road project

- Mokala junction to Kerala Tamilnadu Border, for LA TOURBO (L&T)

### ISRO Project

- Geotechnical Investigation of ISRO BAY at BHEL, Ranipet

### Soil Investigation for CINDA Engineering & Construction Pvt Ltd

- Geotechnical Investigation for 68 nos of borehole at Bangalore for CINDA Engineering & Construction Pvt Ltd.
- Geotechnical Investigation and Topographical Survey of Foxconn (FII) Mars Project, ESR Park, Chennai.
- Geotechnical Investigation for Pouchen Shoe Factory at Uthukottai.



## **TATA Tunnel casting yard project**

- Geotechnical Investigation Chennai Metro Rail Tunnel casting Yard for TATA Projects Limited

## **Geotechnical Investigation of Thermal Power project**

- Coal Jetty with Unloading facilities & Pipe conveyor for 2 x 650 MW Udangudi Supercritical Thermal Power Project, ITD (Offshore and Onshore)

## **Soil Investigation for EKK Infrastructure**

- Geotechnical Investigation service for grade separators at four locations along the Chengalpattu - Tindivanam Section of NH 45 in Tamilnadu

## **Telecommunication Tower Projects for Reliance**

- Geotechnical Investigation Service for 18 tower sites in Tamilnadu Region for Reliance Telecom

## **Soil Investigation at a Japanese Packaging factory**

- Geotechnical Investigation works at OJI India Packaging Pvt Ltd Vallam Vadagal for Fujita Engineering India Pvt Ltd

## **Soil Investigation for Tecso Charge Zone Ltd**

- Geotechnical Investigation works for Charging station at Vellore, Krishnagiri, Pallavaram and Vanagaram

## **Bangla Bhavan project for Bengal PWD**

- Geotechnical Investigation in connection with the construction of Bangla Bhavan at Pallikaranai for Bengal PWD was conducted by us

## **Soil Investigation for CETC Renewable Energy Technology India Pvt Ltd**

- Geotechnical Investigation at Tada Site

## **Soil Investigation for Jai Energy Engineers**

- Geotechnical Investigation at Mettur Site

## Soil Contamination Project for L&T

Stability that lasts a  
**lifetime**

- Geo Environmental test for soil contamination with Petrol & Diesel in Raja Annamalaipuram Petrol pumps for LARSEN & TOURBO (L & T)

## Soil Investigation for a Highway project

- Geotechnical Investigation for 64 nos of Boreholes for EKK Infrastructure Limited for Highways – Thiruvallur to Veppampattu Bypass

## Plate load test for Shimzu

- 100+ Plate load test and Field CBR test for Shimzu corporation India Pvt. Ltd. at Ponneri, Tamilnadu

## Soil Investigation for a Petrochemical Plant on 4300 acres (HPL)

- Geotechnical Investigation for 160 nos of Boreholes & Further special tests like Standard Cone Penetration Test, Cross-hole down Seismic test, Electrical resistivity test, Thermal resistivity test, Trial Pits, Block vibration Test, Plate load test, Filed permeability test & Water standpipes for Monitoring groundwater level for M/s. Haldia Petrochemicals Limited at Cuddalore for Oil to Chemicals (OToC) Projects

## Soil Investigation for Ecoteq Green Energies Foundation

- Geotechnical Investigation for Solar plant works at Nuclear Power Corporation of India Limited, Kalpakkam



# Major Projects done for Military Engineers Services :

- Geotechnical Investigation of demolition of Existing 5nos. building 152 flats and reconstruction of 152 Type II flats G Plus 12, 2 blocks at CGRA RAGAMALIKA, Mogappair, Chennai.
- Geotechnical Investigation and Topographical Survey for Provision of Boundary wall at 36.6 acres (14.82 Hectares) at Sathakkonvalasai Near Uchipulli Mandapam.
- Geotechnical Investigation for Construction of overhead reservoir at MRC Wellington.
- Geotechnical Investigation for Provision of deficient married accommodation (Type-II&III) Phase-II at New CGRA near mandapam camp under ICGS Mandapam.
- Geotechnical Investigation for Provision of Unit Technical Library at CGRA Tuticorin.



## Major Survey Projects in India :

### Topographic Survey project for IIT

- Drone and DGPS Survey work at Marthandam, Kanyakumari District for IIT Chennai

### Bio-diversity Survey Project

- Under water Bio-diversity survey at Vembar coast of Tuticorin District in Gulf of Mannar for Acme Cleantech Solutions Pvt Ltd

### Complete Survey for a land area of 4300 acres for a Petrochemical Plant (HPL)

- Topography, GPR & Laser scan survey ( TLS & Geoslam ) was carried out at the proposed oil to Polymer project at Cuddalore using Auto level, Total Station, Drone, DGPS, LiDAR and GPR instruments for M/s. Haldia Petrochemicals Limited

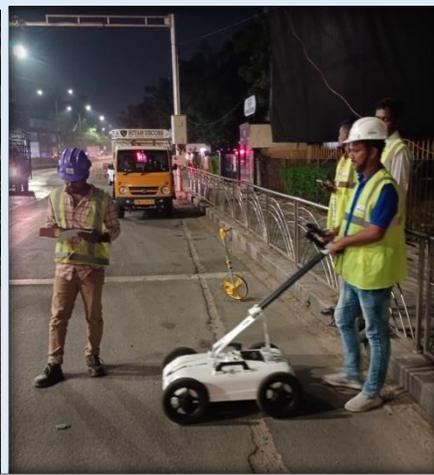
### Survey Works for CPWD

- Preparation of Digitalised Topographical survey Plan and Site soil investigation for the Construction of Proposed New Building for NIEPVD-Regional Chennai at Poonamalle ,Chennai



## Ground Penetrating Radar (GPR) Survey project

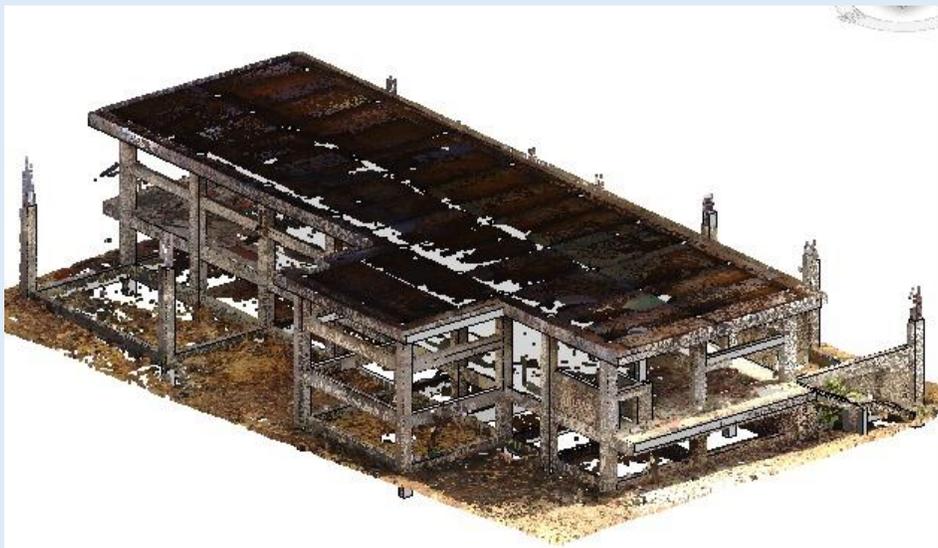
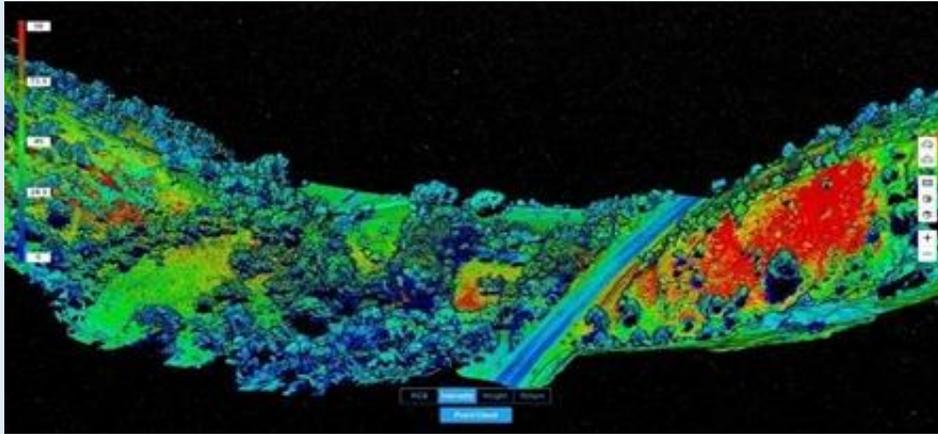
- Ground Penetrating Radar survey for 800 acres to check underground utilities at Cuddalore for M/s. Haldia Petrochemicals Limited.
- Finding & Locating Manholes for CMWSSB, Velachery, Chennai.
- Finding & Locating Underground Utilities for Traffic lights at Harrington road, Dr. Guruswamy road & Burnaby Taylors road for M/s. L&T CMRL Projects.
- Finding & Locating Pipelines, Gas lines, Electrical lines and Cables for 686 Sqm. for Atomic power station, Kalpakkam.
- Ground Penetrating Radar (GPR) survey along OMR to check Underground utility for 12km for M/s. L&T CMRL Projects.
- Ground Penetrating Radar (GPR) survey for runway at Air Force station Arjan Singh under GE (AF) Panagarh for finding and locating utilities for 1,37,500 sqm for Military Engineer Services (AF) Panagarh division, West Bengal.
- Ground Penetrating Radar survey of finding Utility for 45500 sqm at ECHP Area of Unit-1, Unit-2 at 2x660 MW Ennore SEZ STPP for M/s. Bharat Heavy Electricals Limited.
- Ground Penetrating Radar Survey at Ariyamanagalam Railway Crossing in Trichy & Namakkal GA, Tamil Nadu for IRM ENERGY PVT LTD.
- Ground Penetrating Radar Survey for Environmental Protection Service Company (I) Pvt Ltd at Shell Petrol Pump, Vadapalani



- GPR Survey work was carried out for M/s. AT India Auto Parts Private Limited, Bangalore, Karnataka located at Bidadi Industrial Area. Based on the GPR Survey findings, foundation recommendation was given for a Machinery foundation to be changed from Piling to Isolated footing with Ground Improvement
- Ground Penetrating Radar (GPR) survey to check Underground utility for 3.8km for IIT Madras, Chennai.

## LiDAR or Laser Scan Survey for an Existing Plant

- Laser Scan Survey was carried out at an existing plant for M/s, Haldia petrochemicals limited using terrestrial LiDAR (TLS) and Geoslam LiDAR to generate the as-built drawings, Laser scan survey was done for the land area of 1,50,000 square metre.



## Non Destructive Test (NDT) and Other services

- Visual building condition assessment survey and execution of rehabilitation works for Akshaya White house at Gandhi nagar, Adyar.
- Building condition assessment report, NDT, strength check and provided the building stability certificate for CINDA Engineering and Construction Pvt. Ltd..(G+3 building).
- Testing for Concrete strength and Rebar corrosion at Prince tower for B+G+9 building.
- Field observation and evaluation report for Inverter control room building on Existing solar plant at Nargund Site for Ayana Renewable Power Pvt Ltd (Anantapur Solar Parks Private Limited)



## Hydrological Study

- Finished Ground Level (FGL) Study for ACME Clean Energy Private Limited at Gopalpur, Odisha

# Major Projects in Foreign countries

## Geotechnical Investigation works

### Soil Investigation in Maldives

- Geotechnical Investigation for JMC Towers  
– Construction of 2000 social housing units projects at Hulhumale Phase II, Maldives

### Soil Investigation For Valena International Airport

- Geotechnical Drilling, Field Testing, Lab testing & recommendation for International Airport for Saudi Bin Laden group

Turning soil into  
Success

### Soil Investigation for Ooredoo

- Geotechnical Investigation for Ooredoo multistorey Headquarters in Hulhumale Phase I for Ten Architects, Singapore

### Soil Investigation for HDC

- Geotechnical and Environmental studies for Housing Development Corporation (HDC) Road Project in Thilafushi



## Soil Investigation in Male, Maldives

- Geotechnical Investigation of King Salman Mosque in Male for Saudia Bin Laden group

Stability  
starts with  
Success

## Soil Investigation in Maldives

- Geotechnical Investigation for G+12 Residential Building, Phase I, Hulhumale for MM Infrastructure Pvt Ltd

## Soil Investigation for Sandal Mauritius Ltd

- Geotechnical Investigation for two multistorey towers at Hulhumale Phase I for Sandal Mauritius Ltd



## Construction of Tower Buildings

- Construction of Tower Buildings at Phase II, Hulhumale for Gian P Mathur & Associates Pvt Ltd

## Soil Investigation for Mohan Mutha Point Three LLP

- Geotechnical Investigation at ADDU International Airport for Mohan Mutha Point Three LLP and Borewell drilling works



# Soil Investigation for Island Aviation Services

- Geotechnical Investigation for the construction of 14 Storey building for Island Aviation Services Ltd at Male for Riyan Pvt Ltd

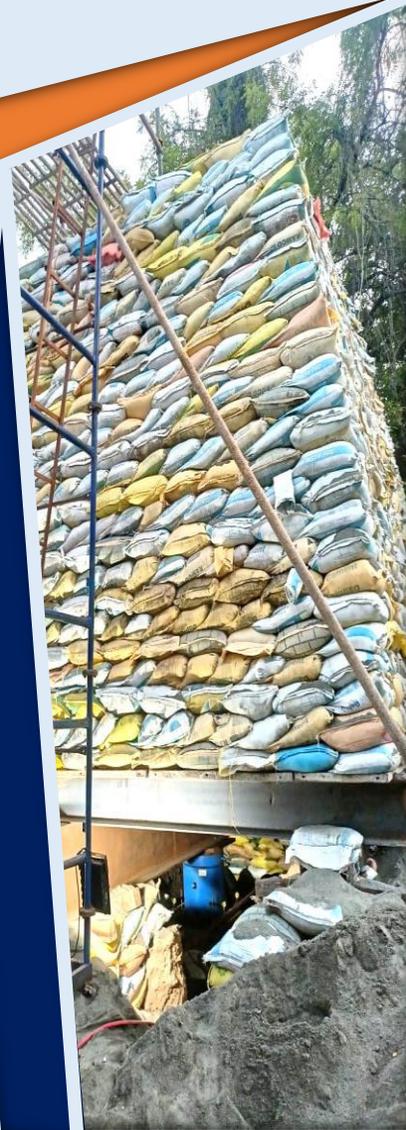
## Soil Investigation in Addu, Maldives

- Geotechnical Investigation for Renaatus Private Ltd at GAN International Airport, Addu, Maldives



## Major - Pile Load Test Projects in India & Abroad :

- Initial Vertical Static Pile load test for Construction of 2000 social housing units, JMC at Hulhumale Phase II, **Maldives**
- 3 nos of Initial Vertical Static Pile load test for the Project of Major upgradation at Madurai Railway Junction, Madurai, Tamilnadu, India
- 2 nos of Working Vertical Static Pile load test for the Project of Major upgradation at Madurai Railway Junction, Madurai, Tamilnadu, India
- 2 nos of Initial Lateral Pile load test for the Project of Major upgradation at Madurai Railway Junction, Madurai, Tamilnadu, India
- Working Vertical Static Pile load test for Highway Project at Sathyamangalam, Tamilnadu, India



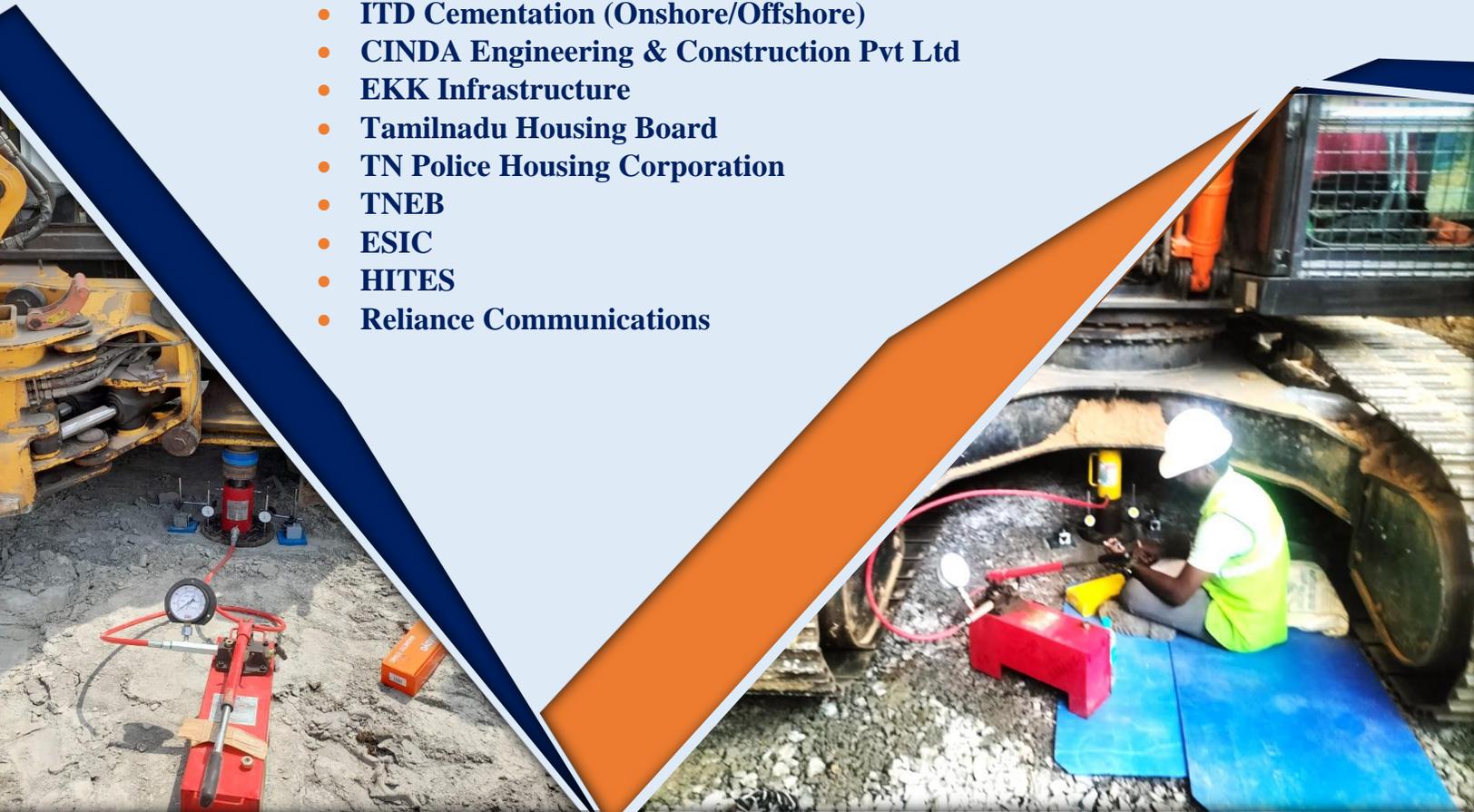
# Major-Pile Integrity Test Projects in India & Abroad :

- 609 nos of Pile Integrity test for JMC at DLF, Taramani, Tamilnadu, India
- 250 nos of Pile Integrity test for Southern Bio Energy Ltd at Zambia
- 46 nos of Pile Integrity Test for JMC Private Ltd at Hulhumale, Phase II, Maldives for the Project fo construction of 2000 Social housing units
- 2470 nos of Pile Integrity Test for Varindera Constructions Ltd at Hulhumale, Phase II , Maldives for the Project of Construction of 632 & 768-3Bhk Social Housing units
- 200 nos of Pile Integrity Test for Renaatus Private Ltd at Hulhumale, Phase II, Maldives for the project of Construction of 600-2 Bhk Social Housing units
- 157 nos of Pile Integrity Test for M/s Crescon Projects & Services Pvt Ltd at Cuddalore, Tamilnadu, India



# OUR CLIENTS IN INDIA

- CMRL
- L&T
- Military Engineering Services
- Fujitha Engineering India Pvt Ltd
- Shimzu corporation India Pvt Ltd
- Anna University
- Power Gas Energy Pvt Ltd
- ECCI, Pithavadian & Partners
- Panchayat & Municipalities
- Gammon India Ltd
- BSAU College
- Beach minerals Pvt Ltd
- B&B Builders & Developers
- DABC
- Jeyachandran Textiles
- TVS Emerald
- BHEL
- BEL
- CLRI
- Haldia Petrochemicals Ltd
- CPWD
- Acme Cleantech Solutions Pvt Ltd
- South India Shelters
- ITD Cementation (Onshore/Offshore)
- CINDA Engineering & Construction Pvt Ltd
- EKK Infrastructure
- Tamilnadu Housing Board
- TN Police Housing Corporation
- TNEB
- ESIC
- HITES
- Reliance Communications



# OUR FOREIGN CLIENTS

- **Thilafushi Corporation**
- **Mohan Mutha Point Three LLP**
- **Southern Bioenergy Ltd, Zambia**
- **Clartech Solutions, Oman**
- **CINDA, Taiwan**
- **Fujitha, Japan**
- **Valena International Airport, Maldives**
- **Addu Airport, Maldives**
- **Gan International Airport, Maldives**
- **Riyaan Pvt Ltd, Maldives**
- **SHIMZU, Japan**
- **Saudi Bin Laden Group (SBG)**



# OUR CLIENTS



MILITARY ENGINEERING SERVICE (MES)



Commitment, Reliability & Quality



## Contact Us :

If you are interested in learning more about our services or would like to discuss your engineering project with us, **please don't hesitate to contact us**



At the heart of  
every project is a  
Strong &  
Economical  
Foundation

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