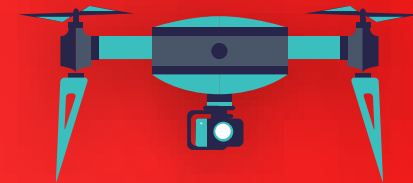


BIRDSCALE



PROJECTS PORTFOLIO



Pipeline Alignment Survey

Pipeline alignment of over 64Kms(50m width) from Bhavani to Perundurai in **three different alignments**.

Dispute Survey(PH1 - PH2)

Land dispute resolving using superimposed 2D map with local SF records and contouring.



ATHIKADAVU AVINASHI PROJECT

Total Scope - 64 Kms

Time Taken - 6 Days

- Contours & Elevation
- Topography
- 4k Videos and Photos

360 Play and Progress Monitoring(Pipelines)

4k videos and 360 degree view for pipeline and pumphouse construction monitoring.



Pipeline Alignment Survey

Pipeline alignment of over 49Kms (50m width) from Chithode to Vijayamangalam for pipeline instalment feasibility.

Alignment Photography

Complete capturing of alignment with AutoCAD attachment facility and integrated plantation data.



ATHIKADAVU AVINASHI PROJECT

- Total Scope - 92 Kms
- Time Taken - 10 Days
- Contours & Elevation
- Topography
- 4k Videos and Photos

Aerial Videography

4k videos and 360 degree view for pipeline alignment with geotagging the required locations.



Volumetric Analysis

Stockpile calculation for levelling of **Kalingarayan canal** for water pumping in main sump of pumphouse 1.

3D Modelling

3D recreation of pumphouse for remote monitoring and easy understanding of pumphouse surroundings.



KALINGARAYAN CANAL - VOLUMETRIC ANALYSIS



- Total Span - 2 Days
- Volume Calculations
- Elevation banding
- Cut and fill analysis

360 play of Pumphouses

4k videos and 360 degree view for pipeline and pumphouse construction monitoring.



Progress Monitoring

Complete progress monitoring of pumphouses and reality capture of pumphouse interior & exterior.

3D Modelling

3D recreation of pumphouse for easy analysis and AutoCAD integration of the 3D Replica enabling measurements capability.



PUMPHOUSE PROGRESS MONITORING



PROGRESS MONITORING - PUMPHOUSES ATHIKADAVU - AVINASHI SCHEME

- 360 Virtual Walkthrough
- Full Aerial Videography
- Aerial Photography & Mapping

360 play of Progress Monitoring(All Pumphouses)

4k videos and 360 degree view for pipeline and pumphouse construction monitoring.



RENGALI RIGHT IRRIGATION PROJECT

Lift irrigation route planning, environmental analysis and full alignment aerial videography.

Georeferencing Govt Maps

Georeferencing the entire set of village maps with GPS coordinates and identifying the best alignment routes.



LIDAR - PHOTOGRAMMETRY

Total Project Phases with
delivery time : 19 Days
Phase 1 : 1 Lakh Acres

Contours and Topography

Contours at 0.5m interval and
topography denoting features, major
road and water bodies.



01 LOWER SUKTEL LIFT IRRIGATION PROJECT

Lift irrigation route planning, environmental analysis and full alignment aerial videography.

02 Georeferencing Govt Maps

Georeferencing the entire set of village maps with GPS coordinates and identifying the best alignment routes.



LIDAR - PHOTOGRAMMETRY

Total Project Phases with
delivery time : 30 Days
Phase 1 : 2 Lakh Acres

03 Contours and Topography

Contours at 0.5m interval and
topography denoting features, major
road and water bodies.





GANGADHAR MEHER IRRIGATION DEPARTMENT

Underground pipeline route planning,
environmental analysis and full
alignment aerial videography.

Georeferencing Govt Maps

Georeferencing the entire set of village
maps with GPS coordinates and
identifying the best alignment routes.



TOTAL PROJECT PHASES WITH DELIVERY TIME : 7 DAYS

Phase 1 : 32.5Kms - 4 Days

Phase 2 : 4.5Kms - 2 Days

Aerial Videography


4k video generation of entire
alignment denoting chainages and
major road and water bodies.


Tower Inspection

Automated Tower Inspection for tower audit with an average height of 40m.

Elevation Analysis

Elevation analysis of all towers with 100sqm for all the towers to avoid water logging in water prone areas.






SITE ELUR 1 - ASCEND

Type: Cell tower
Position: 10.84253100, 77.01014600
Tower height and Angle: 42.15 m and 90.8° NW
Description: 40 METRES - MULTI TENANT
Inspection date: August 26th, 2020 23:10 IST
Operators: AIRTEL, VOAFONE IDEA, JIO

TOWER 3 DIMENSIONAL MODEL LINK





AUTOMATED DETECTION OF POTENTIAL HAZARDS AND ANTENNA RECOGNITION

Automated vertical Trajectories with RTK Positioning for interference free flights and more speed with RPA's.

Digitalization

Asset digitalization for easy access and 360 video of all towers for easy tabletop inspection.



Site Survey & Plot Design

Boundary survey and fixing of pillars for real estate housing and future projection.

Land Survey

Land partition and georeferencing of hillside tea estates in Manjoor, Kundah in Nilgiris district.



GREENFIELD : 200 ACRES
WINNERS INDIA : 300 ACRES (ONGOING)

3D Landscape Projection

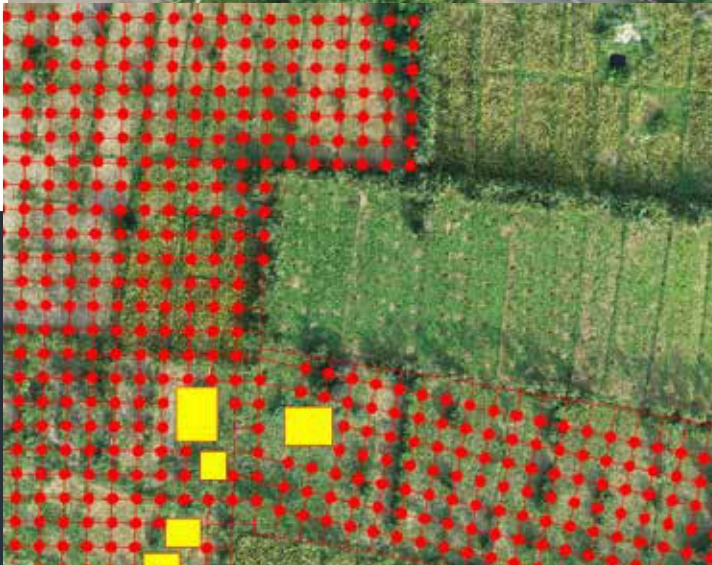
3D mesh construction and building of 3D models for table top access of inaccessible hilly areas.

01 Highway Alignment Survey

Highway Alignment Survey of 40Kms (120m width) from Cuddalore to Madapattu state highway 4 lane expansion.

02 Land Survey

Land partition and georeferencing of industrial land in SIPCOT, Perundurai
Pillars are fixed in field with GPS Coordinates.



PLANTATION ANALYSIS : 1 SQKM
HIGHWAY SURVEY - 37 KMS
EXECUTION TIME : 7 DAYS

03 Plantation Analysis

Land assessment of RPP agrofarms using RTK drones and doing plantation analysis set within suitable Intervals.



01 LiDAR Survey

Highway alignment survey of 40 kms (120m width) from Chithode to Gobi and Omalur to Tiruchengode state highway 4 lane expansion.

02 Land Survey

Land partition and georeferencing of industrial land in SIPCOT, Perundurai Pillars are fixed in field with GPS Coordinates.



HIGHWAY SURVEY - 81KMS
EXECUTIVE TIME : 3 DAYS

03 Remote Progress Monitoring

Monthly Progress monitoring and quantitative analysis for road alignment and Audit.



01 Factory Audit

Aerial mapping the entire factory with highest possible accuracy to audit and meet compliance and guidelines issued by government.

02 Land Survey

Surveying all the lands owned by Marico(Parachute) and elevation Analysis for sustainable irrigation and plantation analysis.



3D MODELLING : 5.6 LAKH SQ.FT
LAND SURVEY - 80 ACRES

03 3D modelling

3D modelling the factory buildings, refineries and pipelines for future expansion scope and alterations.



01 Blade Inspection

Automated blade inspection for 2MW wind turbines at the height up to 140 m

02 Land Allocation

Land survey of 32sqkm in Udumalpet - Coimbatore corridor for installation of new wind turbines.



AUTOMATED DETECTION OF CRACKS AND DAMAGES IN TURBINE BLADES.

Automated vertical Trajectories with RTK Positioning for Interference free flights and more speed with RPA's

03 Digitalization

Superimposing Local land records for Data Digitization and Easting the land acquisition for machine instalment.





Topographical Features

Topographical elements include chainages, the current ground level at intervals of 10 meters, the direction of the water flow, the sites of the storage tanks, and the existing drainage.



Longitudinal Section

We are offering a longitudinal storm water drain section that comprises chainages, the existing ground level, invert level, and level differences at 20-meter intervals.



**SENNEER KUPPAM PANCHAYAT
THIRUVALLUR**
TOTAL NO OF WARDS: 5
TOTAL LENGTH: 8KM

Structural Details

Storm water drain and storage tank structural details are provided by us.



Topographical Features

Existing buildings, a natural stream, pond, and other topographic features are among those that have been provided.

Cadastral

Georeferenced Cadastral map based on Village are the Deliverables



**WATER BODY MAPPING - OCTDMS ,
ODISSA WATER BOARD
TOTAL AREA : 2.79 SQ.KM**

Bathymetric

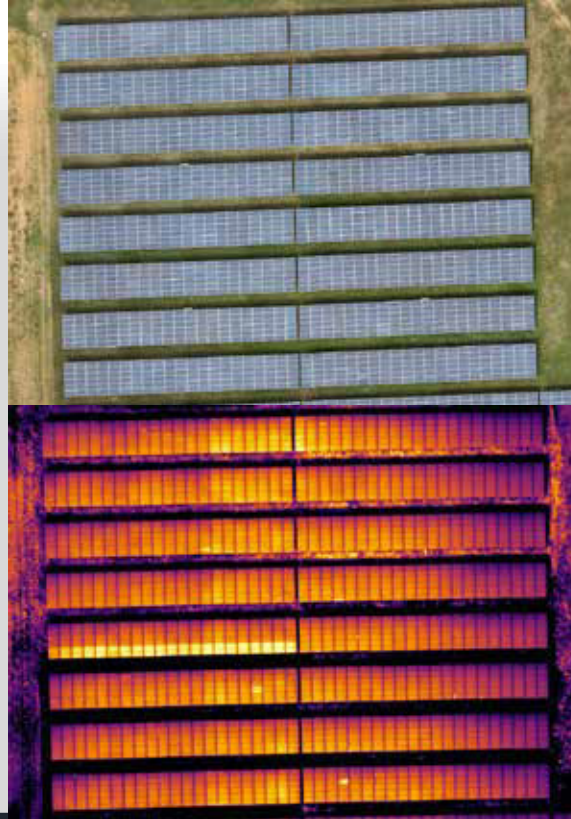
Bathymetry is the measurement of the depth of water in oceans, rivers, or lakes. Bathymetric maps look a lot like topographic maps, which use lines to show the shape and elevation of land features

IR/Thermal Inspection

Find anomalies (high-temperature zones) which indicate specific types of defects of various components of a Solar PV Module, the cause of such types of defects and to provide suitable corrective action to avoid further damage & ensure normal functioning of modules.

Hotspots of Anomalies

Access to critical areas by locating each defect individually and generating a detailed report that includes the temperature changes.



SOLAR PANEL INSPECTION
EXECUTIVE TIME : 1 DAY
TOTAL AREA : 8.1 ACRES

Proactive Measures and Recommendations

Proactive measures to address potential areas of defects in the future and Recommendations for repairing or replacing any defective components, aim to mitigate potential risks to the product or system.

360 Experience

Our professional 360° photographers capture your business, property or location to produce interactive and immersive 360° Virtual Tour experiences.

Virtual Walkthrough

We Create Great Impression with 3D Virtual Walkthrough for Your Business & Grab the Attention. Attract customers with high-quality stunning 3D walkthrough film that boosts your business.



PSG COLLEGE OF TECHNOLOGY
TOTAL NO OF BLOCKS : 14
EXECUTIVE TIME : 30 DAYS

Walkthrough Video

We provide immersive videos. Spherical videos, are video recordings where a view in every direction is recorded



PALLAPATTI MUNICIPALITY
KARUR DISTRICT
TOTAL NO OF WARDS : 20
EXECUTIVE TIME : 10 DAYS

[illegible]



Aerial Shoot

Birdscale aerial shoot is the capture of video by a remotely-operated or autonomous unmanned aerial vehicle (UAV), also known as an unmanned aircraft system (UAS) or, more commonly, as a drone.

Highway Mapping

Accelerate highway projects with our drone solutions. Our drone-based services span pre-construction, construction and post-construction stages of highway.



INDORE METRO PROJECT
TOTAL DISTANCE COVERED : 6KM
EXECUTIVE TIME : 2 DAYS

Chainage

We provide chainage along with the video to refer a distance measured in metres of a road.



Progress Monitoring

Better practical methods to monitor progress in Realtime. By identifying any phase of the project that is getting delayed and monitoring your job sites. You have more control at your fingertips.

Aerial Photography & Videography

Using Aerial Photography, we indulge in high-quality aerial shoots to deliver photography & videography. To easily monitor the progress of the warehouses.



NDR ALL INDIA WAREHOUSES
TOTAL NO OF WAREHOUSES: 80
EXECUTIVE TIME: 2 HOURS/WAREHOUSE

Recurring Process

The Warehouses are monitored at an interval of 4 weeks (Monthly), providing clear updates of the progress.

3D Modeling

3D modeling is the process of developing a mathematical coordinate-based representation of any surface of an object in three dimensions via specialized software by manipulating edges, vertices, and polygons in a simulated 3D

3D Experience

We provided a complete 3D model of the quench water area. It was show the site in 3D model with perfect detailing to experience.



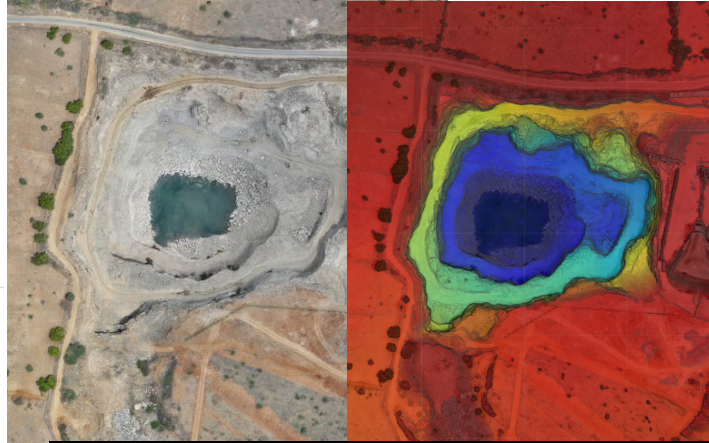
**QUENCH WATER
3D MODELING
EXECUTIVE TIME : 1 DAY**





Land Survey

We provide a Field Measurement Book and georeferencing of the Mining area.



Volumetric Analysis

Setting up cross section information for cut and fill volumetric data.
In cross section details, the elevation of the ground level will be represented graphically at intervals of twenty meters.



KARUR MINING PROJECT

TOTAL AREA : 1.34 HECTARE

TOTAL VOLUME : 264402.58 CU.M

3D Modeling

We have given 3D Model of the mining area for better visualization and understanding.

Land Survey

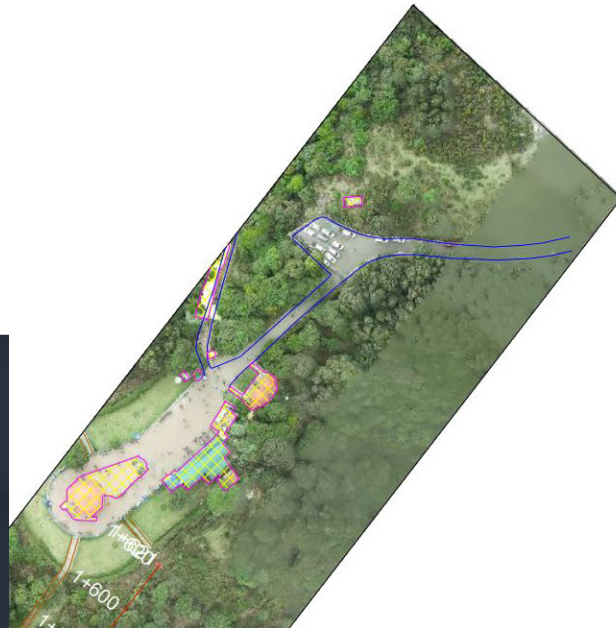
We provide a Topographical Map, and Contour for the Doddapetta rope car project.



DODDAPETTA ROPE CAR SURVEY PROJECT
TOTAL LENGTH : 1.6 KM
HILL PROFILE, TOPOGRAPHICAL MAP
CONTOUR

Alignment Survey

In Alignment survey, we covered a length of 1.6 Km on the hill area and provide a hill profile and contour for a interval of every twenty meters.



3D Modeling

We have given 3D Model of the hill area for better visualization and understanding.



Topographical Features

Topographical elements include chainages, the current ground level at intervals of 10 meters, the direction of the water flow, the sites of the storage tanks, and the existing drainage.

Longitudinal Section

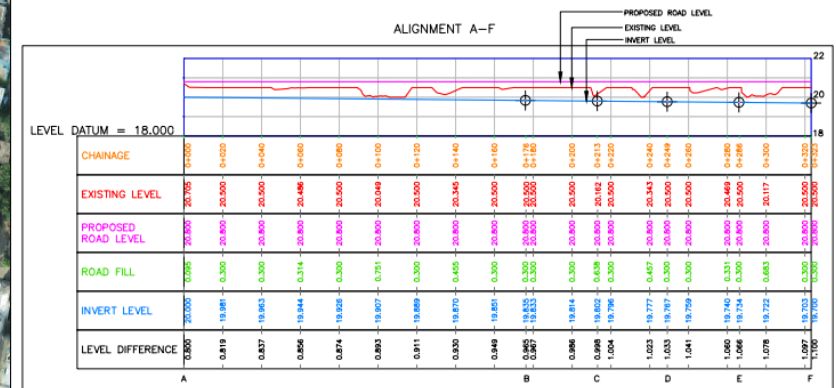
We are offering a longitudinal storm water drain section that comprises chainages, the existing ground level, invert level, and level differences at 20-meter intervals.



**NAZARATHPETTAI PANCHAYAT
CHENNAI
TOTAL NO OF WARDS: 1**



ALIGNMENT A-F

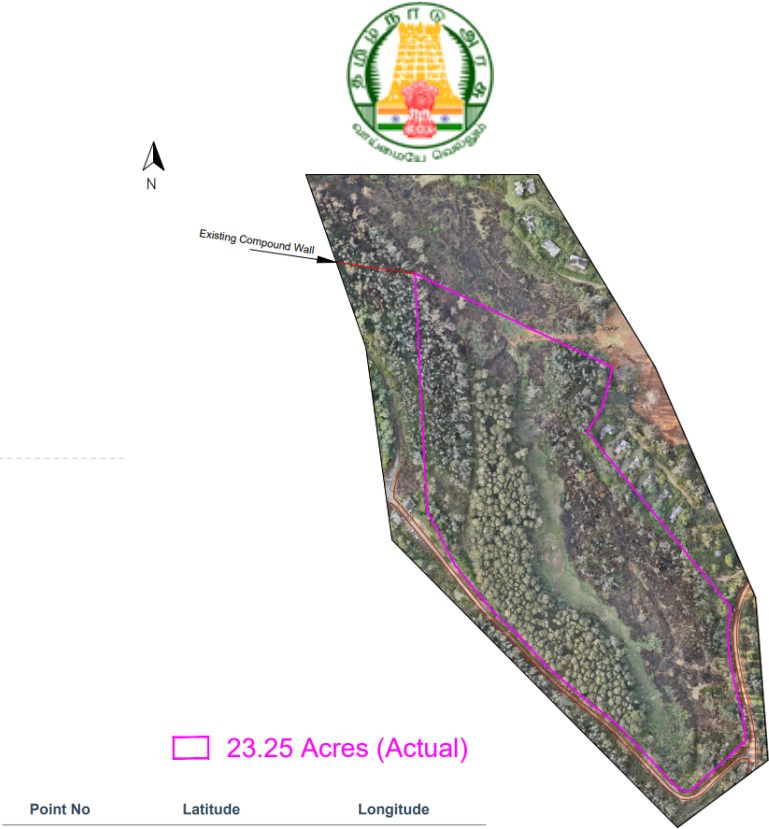


Land Survey

We provide a topographical map, contour and elevation for the amusement park - TN Tourism

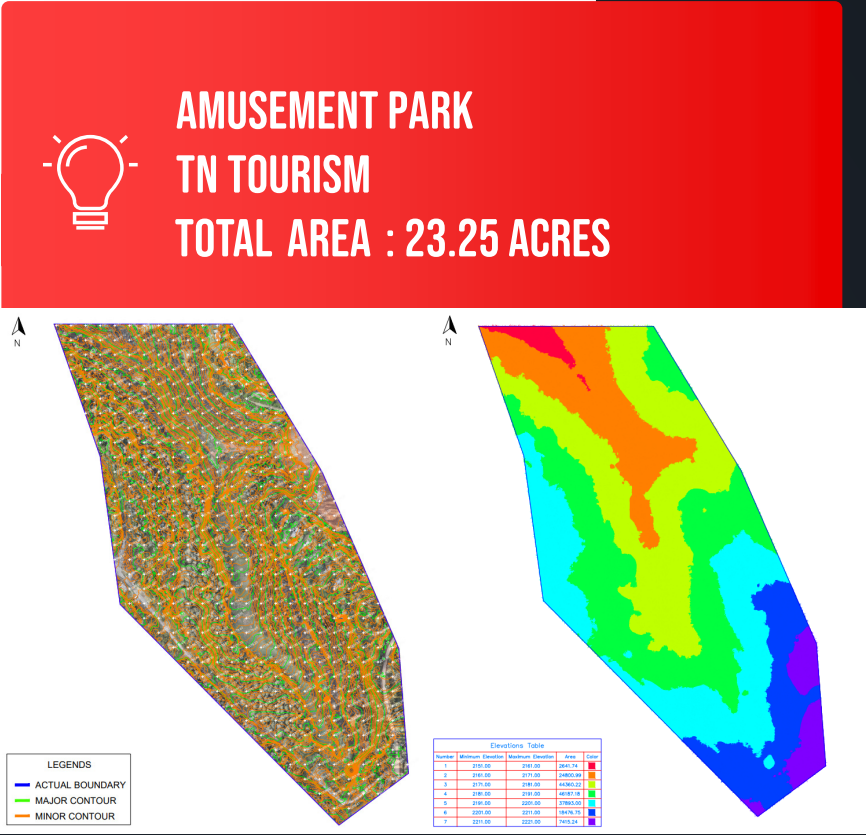
Georeferencing points

We given a georeferencing points on the actual area of the land. It shows the latitude and longitude of every corner of the actual land.



23.25 Acres (Actual)

Point No	Latitude	Longitude
1	11.4310013	76.66452382
2	11.43097418	76.66574653
3	11.43005732	76.66665682
4	11.4292788	76.66695376
5	11.42876006	76.66669833
6	11.42708172	76.66806784
7	11.42579645	76.66819181
8	11.42534392	76.66764116
9	11.42750159	76.66541835
10	11.42802173	76.66515166
11	11.43026764	76.66505144
12	11.43033983	76.6645605



AMUSEMENT PARK
TN TOURISM
TOTAL AREA : 23.25 ACRES



Land Survey

We provide a topographical map, contour and elevation for the Pykara boat house parking

Contour & Elevation

Contours make it possible to show the height and shape of mountains, the depths of the ocean bottom, and the steepness of slopes.

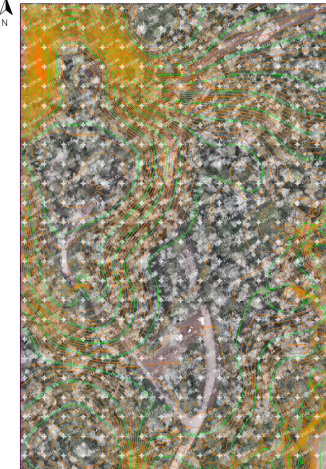


LEGENDS	
	Actual Boundary
	Road Boundary
	Electric Line
	Area Details = 1.27 acre

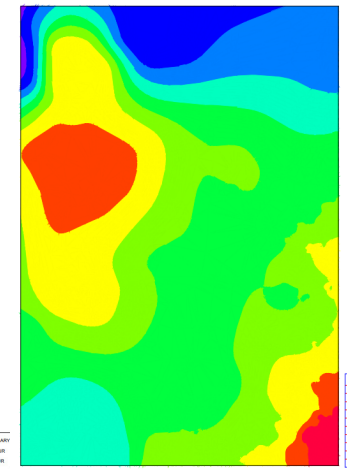


PYKARA BOAT HOUSE PARKING
TN TOURISM
TOTAL AREA : 1.27 ACRES

A
N



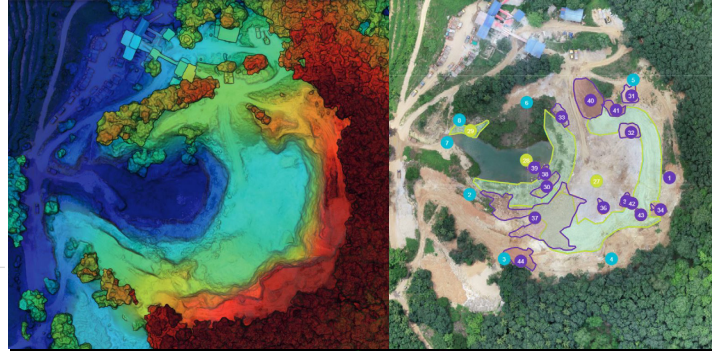
ACTUAL BOUNDARY
 MAJOR CONTOUR
 MINOR CONTOUR



Elevation Table			
Index	Minimum Elevation	Maximum Elevation	Area
1	100.00	100.00	0.00
2	100.00	100.00	0.00
3	100.00	100.00	0.00
4	100.00	100.00	0.00
5	100.00	100.00	0.00
6	100.00	100.00	0.00
7	100.00	100.00	0.00
8	100.00	100.00	0.00
9	100.00	100.00	0.00
10	100.00	100.00	0.00

01 LiDAR Survey & 3D Model

Digital terrain models and 3D modeling enables companies to create accurate representations of the terrain and geological structures.



02 Stock Report

Stock Report including Volume of Granite, Gravel, Soil provides a comprehensive overview of the current stock levels of these materials.



KLTRON - MINING POC KERALA

Stock Report including
Volume of Granite, Gravel, Soil.

03 LS and CS of Terrain Profile

Profiles that includes detailed information about the elevation, slope, and topography of the land, which helps companies to identify potential risks and challenges that may affect their mining operations.



KUMARAGURU
COLLEGE OF TECHNOLOGY

NAAC (National Assessment and Accreditation Council) **IA++** GRADE

Pavement Distress Mapping

UAV-based Pavement Distress Identification using Photogrammetry, LiDAR and Radiometric Thermal Payloads

AI and ML Models

Developing AI Algorithms and ML Models to Automate Pavement Distress Identification



PAVEMENT DISTRESS MAPPING

CATEGORY: R&D PROJECT

In Collaboration with Kumaraguru College of Technology

Efficiency Identification

Efficiency and Accuracy Study of Manual Inspection vs UAV-based Inspection



SANGEETA

AR/VR Experience
360 video integrated on 3D Model

AR/VR Experience

We have created a interactive 360 video in a 3D rendered environment. To give a realistic AR/VR experience.



NATIYA

AR/VR Experience
360 video integrated on 3D Model

AR/VR Experience

We have created a interactive 360 video in a 3D rendered environment. To give a realistic AR/VR experience.

DEPLOYING FUTURE

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MUMBAI, CHENNAI,
COIMBATORE,
VANCOUVER

