



# aarvee associates

architects engineers & consultants pvt. ltd.

AN ISO 9001:2015 CERTIFIED COMPANY



ARCHITECTS | ENGINEERS | CONSULTANTS

# About Us

Aarvee Associates Architects Engineers & Consultants Pvt Ltd is a premier ISO 9001:2015 certified multi-sectorial Infrastructure consultancy established in 1989 in Hyderabad, India. Aarvee has a global presence with subsidiary companies in Australia and United Kingdom and branch offices in Tanzania, Kenya, Ethiopia, Mozambique, Uganda and Kazakistan. Within India, we have branch offices in Ahmedabad, Bengaluru, Bhubaneshwar and New Delhi.

We have successfully carried out over 2,000 assignments in India, Australia, Bangladesh, Botswana, DR Congo, Djibouti, Ethiopia, Gabon, Honduras, Kazakistan, Kenya, Mozambique, Nigeria, PNG, Rwanda, South Africa, Sudan, Sri Lanka, Tanzania, Uganda and Zambia. We continue to work on projects funded by various international agencies, including the World Bank, the Asian Development Bank (ADB), the Japan International Cooperation Agency (JICA), the African Development Bank (AfDB), the New Development Bank, the Asian Infrastructure Investment Bank and the EXIM Bank of India.

With over 3,000 highly qualified and experienced staff, our expertise spans over all the major civil engineering disciplines and infrastructure sectors. We also have a full-fledged material investigation laboratory and excellent in-house survey capabilities, which add considerable value to our work.

With a single-minded focus on exceeding client expectations, our work is characterized by unwavering commitment, utmost reliability, exceptional quality, and on-time delivery.



# URBAN PLANNING

With more and more people migrating to urban areas, the infrastructure in India's towns and cities is coming under increasing strain. Increasing urbanization also creates its own share of environmental and ecological challenges. In this context, the consultancy services we provide to the central and state governments and various local bodies are critical in ensuring the healthy and well-planned growth of our urban agglomerations.

Our urban planning division offers planning solutions, using the latest geospatial tools and techniques, to meet the basic development requirements of government agencies and urban local bodies.

## Services

GIS based Master Plan / Development Plan

GIS based Zonal Development Plan (ZDP)

City Development Plan (CDP)

Regional Plan & District Development Plan

Comprehensive Traffic & Transportation Study (CTTS)

Comprehensive Mobility Plan (CMP)

Traffic Impact Assessment (TIA)

Industrial Estate Master Plans

## Key Projects

Detailed Master Plan and Zonal Development Plan for the Andhra Pradesh Capital Region Development Authority (APCRDA) Region (about 8500 sq.kms), the 2nd largest Capital Region Master Plan in India, Andhra Pradesh, India

Development Plan for Madhava Rao Counter Magnet, Special Development Authority (SADA) area, Gwalior, Madhya Pradesh, India

Master Plan for Kathua and its 5km vicinity, Jammu Division, Jammu & Kashmir, India

Master Plan for Kurnool Municipal Corporation Area and its 5km Vicinity, Andhra Pradesh, India

CDPs for 7 towns in Jabalpur, Katangi Districts, Madhya Pradesh, India

GIS based Master Plan for Siddipet Urban Development Authority (SUDA), Telangana, India

GIS based Master Plan for Nizamabad Urban Development Authority (NUDA), Telangana, India

Perspective Plan, Master Plan and Zonal Development Plan for Nellore Urban Development Authority (NUDA) Region, Andhra Pradesh, India



# URBAN PLANNING

## Services

### Regional Development Plan, District Development Plan, Master Plan and Zonal Development Plan

- Reconnaissance survey
- Updation of Base Map using Satellite Imagery and Geo-referencing & superimposition of Cadastral Map
- Surveys & Analysis - Existing Landuse; Socio -Economic scenario; Traffic & Transportation; Tourism & Heritage & Infrastructure Assessment and Environmental Studies
- Appraisal of the Previous Development Plan (along with deviation) and past planning efforts
- Disaster Risk Assessment and its mitigation measures
- Landuse - Transport Modeling
- Consultative Workshop with Stakeholders at various stages
- Concept Plan, Vision and Development Strategies
- Delineation of Planning Zone Boundaries based on administrative boundaries and demographic profile
- Review and briefing of the various Policy and Management concerning National and State level
- Proposed Landuse along with Mobility Plan
- City Investment Plans, Financing Strategies
- Formulation of Institutional Framework, Development controls and Zoning regulations

### City Development Plan

- Reconnaissance Surveys & Assessment of Existing Situation
- SWOT Analysis
- Infrastructure Assessment, Environmental Studies
- Consultative Workshops
- Development of City Vision, Sector Goals and Strategies
- City Investment Plan(CIP) and Financial Operating Plan(FOP)

### Slum Free City Development Plans

- Geo-referenced Town Maps using Satellite Imagery
- Topographical Surveys and preparation of Base Maps & Thematic Maps on GIS Platform
- Integration of GIS and MIS Data based on the Socio-Economic Surveys
- Assessment and Analysis of Slums
- Biometric Identification of Slum Dwellers
- Development Models for Housing and Slum Infrastructure

### Comprehensive Traffic & Transportation Studies

- Assessment of socio-economic and travel characteristics (travel demand & urban transport system)
- Formulation of Transport Strategy
- Identification of phased program of Transport
- Investments and Management proposals

### Comprehensive Mobility Plans

- Review of the City Profile, Land Use Pattern, Existing Transport Systems
- Transport Demand Surveys and analysis of Existing Traffic/Transport Conditions
- Formulation of Vision, Goals, Urban Growth Scenarios
- Future Transport Network Scenarios, Urban Land Use and Transport Strategy
- Public Transport Improvement Plans
- NMT facility Improvement Plan
- Mobility Management and Improvement Measures
- Regulatory and Institutional Measures along with Fiscal Implementation Program

### Traffic Impact Assessment

- Review of surrounding road network, Traffic flows and Parking implications
- Examine the existing Master Plan as far as roads are concerned
- Study Internal Traffic Flow and Parking arrangement
- Capacity Analysis for prevailing traffic and generated traffic by the proposed development and identifying the potential problems
- Examine the proposed entry and exit locations of the proposed development
- Appropriate traffic management measures for the smooth traffic flow in and out of the developments and circulation plans

### Parking Studies And Management

- Parking Facility Inventory; Surveys and Demand & Supply analysis
- Review of surrounding road network, Traffic flows and Parking implications
- Urban Parking Controls and Design Considerations
- On Street Parking Management Solutions
- Strategic parking policy and pricing
- Mitigation measures and environment issues

### Industrial Estate Master Plan

- Field Visits, Surveys and Investigation
- Detailed Site Analysis
- Zoning and Master Plan as per DCR
- Infrastructure Assessment
- Coordinate Detailed Design and Cost Estimation for Infrastructure Development
- Financial & Economic Assessment of the Project
- Techno Economic Feasibility and Detailed Project Reports

## Selected Projects

### MASTER PLANS/REGIONAL PLANS

Master Plan and Zonal Development Plans for the part of APCRDA (Erstwhile Extended Region of VGTM UDA) (5336.11 Sq.km), Andhra Pradesh, India.

Master Plan and Revised Detailed Master Plan for 1737.41 Sq.km in APCRDA Region excluding Capital City Area and extended area, Andhra Pradesh, India.

Concept Master Plan and Detailed Master Plans for the peripheral extension of APCRDA region (1413.72 Sq.km), Andhra Pradesh, India.

Development Plan for Madhava Rao Counter Magnet (SADA) area (753 Sq.km), Gwalior, Madhya Pradesh, India.

GIS Based Master Plan for Nizamabad Urban Development Authority (NUDA) (568.30 Sq kms), Telangana, India

GIS Based Master Plan for Kadapa Municipal Corporation (193 Sq kms), Andhra Pradesh, India.

GIS Based Master Plan for Siddipet Urban Development Authority (SUDA)(310 Sq kms), Telangana, India.

Perspective Plan, Master Plan and Zonal Development Plan for Nellore Urban Development Authority (NUDA) Region (2211.66 Sq. kms) , Andhra Pradesh, India.

Master Plan for Kurnool Municipal Corporation area and its 5km Vicinity (213 Sq.km), Andhra Pradesh, India.

GIS Based Master Plan for Khammam - Sthambadri Urban Development Authority, SUDA (568.73 Sq kms), Telangana, India.

Master Plan for Kathua and its Vicinity (65 Sq.km), Jammu & Kashmir, India.

### ZDP/CDP/DPR's

ZDPs for 7 Planning Zones in Pilkhwua Master Plan area (28 Sq.km), Uttar Pradesh, India.

Masterplan & DPR for Development of Greenfield Electronic Manufacturing Cluster at Gurrampalem, Visakhapatnam, Andhra Pradesh, India.

Master Plan, DPR and Detailed Engineering for Water Supply, Sewerage and Solid Waste Management for Srisailem (18 Sq.km), Andhra Pradesh, India.

Town Development Schemes for Raipur (188 Sq.km), Raigrah (64 Sq.km) and Dhamtari (62 Sq.km) Towns, Chhattisgarh, India.

CDPs for 7 Towns (Barela, Barhi, Bhedaghat, Shahpura, Katangi, Majholi, Patan), Madhya Pradesh, India.

CDP for Kotma (22 Sq.km) and Pasan Town (15 Sq.km), Madhya Pradesh, India.

DPR for Kironki Dhani Slum under RAY, Jaipur Development Authority, Rajasthan, India.

Slum Free City Plan of Action for Rajahmundry Municipal Corporation under RAY, Andhra Pradesh, India.

## Selected Projects

### TRAFFIC & TRANSPORTATION STUDIES

CTTS for Mahaboobnagar Town(14 Sq.km), Telangana, India

Labelling, Inventory, Sample Traffic Survey and Prioritization of the Major Roads under GHMC Jurisdiction, Hyderabad, Telangana, India

Assessment of Markets' Parking Demand for 10 GHMC Markets, Hyderabad, Telangana, India

TIA Study for Mixed Development Project at Narsinghi, Hyderabad, Telangana, India

TIA Study for Residential Project at Raidurg Village, Serilingampally Mandal, Telangana, India

## Key Projects

### Master Plan and Zonal Development Plans for APCRDA Region



Location : Vijayawada, Andhra Pradesh, India.

Client : Andhra Pradesh Capital Region Development Authority (APCRDA)

Completion : July 2017

Salient Features :

The first State Capital Regional Master Plan of India with a jurisdiction of more than 8000 Sq.km; includes Detailed Master Plans for

(i) Part of APCRDA (Erstwhile Extended Region of VGTM UDA (5336.11 Sq.km)

(ii) CRDA Region (Core area) 1737.41 Sq.km

(iii) Peripheral extension of APCRDA region (1413.72 Sq.km) Master Plan aims to achieve sustainable development by evolving a development vision for balanced growth and regulating future spatial development by enhancing the economic prosperity of the region

### Perspective Plan, Master Plan and ZDP for (NUDA) Region

Location : Nellore, Andhra Pradesh, India

Study Area : 2211.66 Sq. kms

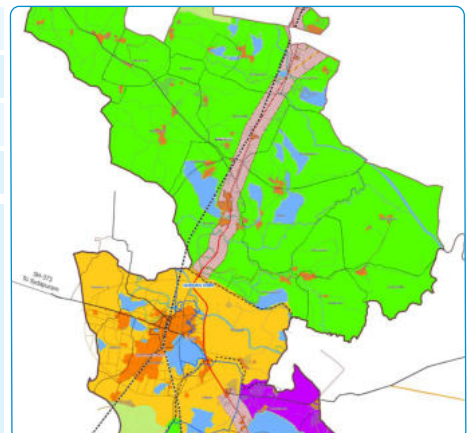
Client : Nellore Urban Development Authority

Completion : Ongoing

Salient Features :

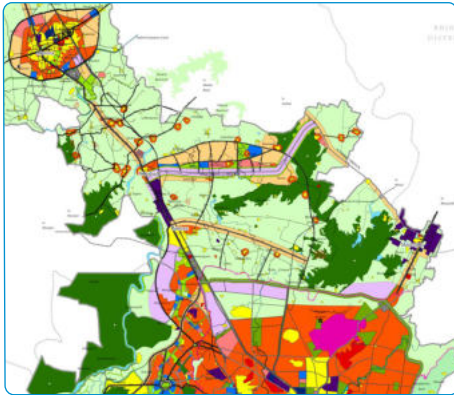
Nellore Urban Development Authority (NUDA) was constituted with an extent of 1644.17 sq. kms with 5 ULBs and 156 Villages further extended to an extent of 567.49 Sq. kms with 1 ULB and 64 Villages.

Total Extent of NUDA Jurisdiction is 2211.66 Sq. kms comprises of 6 ULBs and 213 Villages.



## Key Projects

### Development Plan for Madhava Rao Counter Magnet (SADA)



Location	: Gwalior, Madhya Pradesh, India.
Study Area	: 753 Sq.km
Client	: State Institute for Town Planning (SITOP)
Completion	: February 2017
Salient Features	: Identified as one of the counter magnet cities; the main emphasis of the study proposal was to set up an Industrial corridor to attract investors to setup small and medium scale industries and the same was aligned to connect two major industrial estates i.e., Bamore (Gwalior District) & Malanpur (Bhind District).

### GIS based Master Plan for SUDA

Location	: Siddipet, Telangana, India
Study Area	: 310 sq. kms
Client	: Siddipet Urban Development Authority
Completion	: Ongoing
Salient Features	: Siddipet Urban Development Authority (SUDA) was constituted with an extent of 310 sq. kms with 26 Villages. Siddipet which is headquarters of Siddipet district is in proximity area of Hyderabad in northern direction, connected with State Highway 1.



### Comprehensive Traffic and Transportation Study for APCRDA



Location	: Vijayawada, Andhra Pradesh, India.
Study Area	: 8,603.32 Sq.km
Client	: Oriental Consultants Global Co. Ltd., (APCRDA)
Completion	: March 2019
Salient Features	: The overall purpose of CTTS is to improve transport planning and implementation at all levels throughout the Urban Local Body/ Development Authority. The IAP is a first step in this process at the local level, focuses on small-scale transport improvements that can make a significant impact in a short time at low cost. The Immediate Action Plan (IAP) will help the Municipality take up transport improvements at priority locations identified by the Municipality and other stakeholders. The IAP will then be followed by the Urban Transport Plan (UTP), which will be a more comprehensive plan and programme for longer-term transport improvements in the Municipality and surrounding urban areas.

## Key Projects

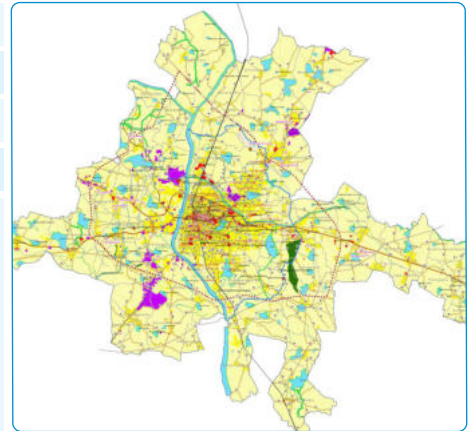
### GIS based Master Plan for NUDA



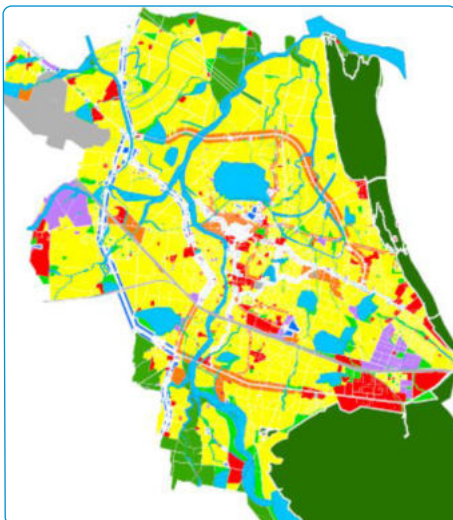
Location	: Nizamabad, Telangana, India
Study Area	: 568 sq. kms
Client	: Nizamabad Urban Development Authority
Completion	: Ongoing
Salient Features	: Nizamabad Urban Development Authority (NUDA) was constituted with an extent of 568 sq. kms with NMC & 73 Gps. Third largest town by population (5.09 lakhs for planning area), next to Hyderabad and Warangal ( 2011) in Telangana State.

### GIS based Master Plan for SUDA

Location	: Khammam, Telangana, India
Study Area	: 568 sq. kms
Client	: Stambhadri Urban Development Authority
Completion	: Ongoing
Salient Features	: The Stambhadri Urban Development Authority was constituted on 24.10.2017. The newly formed SUDA consists of Khammam Municipal Corporation, Wyra Municipality and 44 villages of the Khammam district. The GIS based Master Plan is to be prepared for a planning area of 696.53 sq. km including the erstwhile Municipal Corporation covering an area of 93.45 sq kms.



### GIS based Master Plan for Kadapa



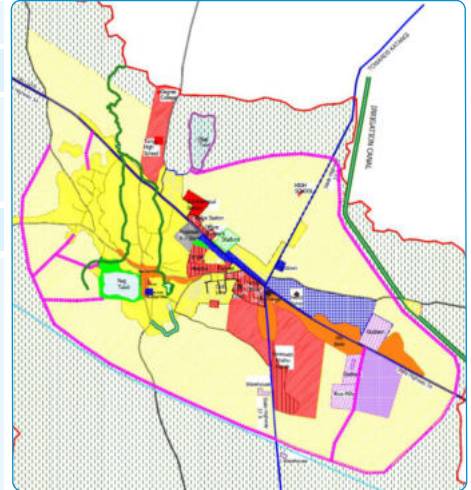
Location	: Kadapa, Andhra Pradesh, India
Study Area	: 193 sq. kms
Client	: Kadapa Municipal Corporation
Completion	: Ongoing
Salient Features	: Kadapa town is in YSR district in Rayalaseema, the South-central region of Andhra Pradesh selected as AMRUT town for preparation of GIS based Master Plan which comprises of 3,64,894 population with the Master Plan area of 193 sq kms surrounded by Penna river on south and on 3 sides by the Nallamala and Palkonda Hills lying on the tectonic landscape between the Eastern and Western Ghats.



## Key Projects

### CDPs for 7 Towns in Madhya Pradesh

Location	: Madhya Pradesh, India.
Study Area	: 83.36 Sq.km
Client	: Barela, Barhi, Bhedaghat, Shahpura, Katangi, Majholi, Patan-Jabalpur & Katangi Districts, Madhya Pradesh, India.
Completion	: May 2015
Salient Features	: The CDPs provides a comprehensive long term strategy (Vision 2035) as well as a City Investment Plan (CIP), along with phasing of priority actions. A Financial Operating Plan (FOP) is prepared to direct the ULBs for mobilising various financial resources. For Each city “Unique Selling Points” have been identified which symbolizes the city’s importance in terms of economy/tourism.



### ZDPs for 7 Planning Zones in Pilkhuwa Master Plan area



Location	: Pilkhuwa, Hapur, Uttar Pradesh, India.
Study Area	: 28 Sq.km
Client	: Hapur Pilkhuwa Development Authority
Completion	: May 2015
Salient Features	: The plan elaborates on the community level land use and infrastructure that includes subclassification of roads and streets, parks and open spaces, community facilities, services and public utilities etc. It outline various development controls which eases the approving process of layouts for each planning zone complimenting the framework of a Master Plan.

# & RAIL METRO RAIL

In the face of increasing energy prices, railways has re-emerged as a relatively attractive means to transport both passengers and freight. Growth in this sector has also been fuelled by the growth of the extraction and processing industries, and developments in the power sector. Having planned and designed over 10,000km of railway lines and overseen the development of another 3,000km of railway track from concept to commissioning, we are one of the few wholistic railway consulting firms in India. In addition to civil infrastructure for Metro Rail, Heavy Haul Freight Rail and High-Speed Rail projects in India and overseas, we also have expertise in signalling and tele-communication, overhead electrification and loco and wagon related services.

## Services

### Passenger, Freight, High Speed and Metro Rail:

Master Planning/Feasibility Studies (FS)/Viability Studies

Detailed Project Reports (DPR)

Pre-bid and Detailed Engineering Services for PPP/BOT/EPC Projects

Project Management Consultancy (PMC) and General Consultancy Services (GC)

Detailed Design - Alignment, Track, Civil Works (Viaducts, Bridges, Stations & Buildings), Signalling & Telecommunication Systems, Electrical & Traction Systems

Loco and Wagon Related Services

## Key Projects

DPR and Final Location Survey for 4500km for East Coast, East West and North South Sub-Corridors of DFCCIL, India.

PMC for Mumbai Ahmedabad High Speed Rail Corridor for National High Speed Rail Corporation, India

Final Alignment Design for New High Speed Rail Corridors: Delhi - Varanasi & Lucknow – Ayodhya, Delhi – Amritsar & Sangrur – Chandigarh, and Chennai - Bangalore - Mysuru for NHSRCL, India

Detailed Design, Construction Support and As-built Engineering support for Carmichael Rail Network design of a 200-kilometer-long narrow-gauge rail network, Bravus Mining & Resources, Queensland, Australia

GC for Lucknow Metro Rail Project for Lucknow Metro Rail Corporation, Uttar Pradesh, India

GC for Corridor 3 & 5 (JICA Portion) of Chennai Metro for CMRL, Tamil Nadu, India

Detailed Design Consultancy for Phase II of Chennai Metro for CMRL, Tamil Nadu, India

Technical assistance study for instrumentation of new proposed Vaitarana Bridge and one major bridge with open web steel girder for MRVC, India

FS, Detailed Design, Tendering Services and Construction Supervision for Dual Gauge Railway Line from Bogura to Shahid M. Mansur Ali Station of Bangladesh Railway (EXIM Bank of India Funded)

# & HIGHWAYS BRIDGES

A modern and efficient road network is an essential component of a nation's infrastructure, and an important prerequisite for sustained economic growth. Many countries have been making great strides in improving their highway infrastructure, and we have been participating in different stages of this transformative process for many years. In the last twenty years, we have provided consultancy services in more than 150 highways projects with a total road length of over 20,000km in India, Bangladesh, Australia, East African Countries such as Djibouti, Ethiopia, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Zambia.

## Services

- Feasibility Studies (FS) and Detailed Engineering Services
- Construction Supervision (CS)
- Independent Engineer's Services (IE)
- Pre-bid and Detailed Engineering Services for PPP/BOT/EPC Projects
- Lenders Engineering Services (LIE)
- Authority Engineer's Services (AE)
- Detailed Project Reports (DPR)

## Key Projects

- Detailed Engineering Services for the Hyderabad Outer Ring Road, Telangana, India
- DPR for work of Construction of Two Interchanges at Amra Marg with NH-4B near Gavhan Phata and at Karal Junction with NH-4B and SH-54 in Mumbai in Maharashtra, India
- DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana for Surat – Nashik – Ahmednagar – Solapur – Akalkot – KN/TS Border (750 km) section under Surat - Chennai Corridor, India
- DPR for construction of 6 lane Cable Stayed bridge across Mir Alam tank connecting Bangalore National Highway to Chintelmet Road, Telangana, India
- Improvement-Development and Management of New Indian Bridge Management System for all type of bridge structures on National Highways in the Country, India
- AE for Six Laning of Km. 192.000 to Km. 198.000 between Vadodara–Surat section of NH-8 including construction of a new four lane Extra Dosed Bridge across river Narmada in the State of Gujarat, India
- IE services for 4-laning of Beawar-Pali-Pindwara on of NH-14 (244km) under NHDP Phase-III on Design, Build, Operate and Transfer (Toll) basis in Rajasthan, India

# AIRPORTS

With air travel becoming a key factor for the growth of our economy, it is essential to ramp up airport infrastructure in the country to cater the growing demand in the market. Our multi sectorial expertise enables us to undertake the complex interfaces between city side, air side and terminal infrastructure.

## Services

Feasibility Study (FS) / Technoeconomical Feasibility Study

Detailed Project Reports (DPR) / Detailed Design Consultan (DDC)

Project Management (PMC) / Authority's Engineer (AE)

## Key Projects

PMC for Development of Operational Area of the New Green Field Airport at Dholera for Dholera International Airport Corporation Limited (DIACL) Gujarat, India

DDC for cargo food court, Gate No:8, Cargo fire tank, Cargo, Landslide road, Cargo compound wall and reconstruction of Roda at gate No:6 Chatrapati Shivaji Maharaj International Airport, Mumbai, Maharashtra, India

Design Services for Hangar for BSF at Swami Vivekananda Airport, Raipur, Chhattisgarh, India

# ROPEWAYS

Ropeways are a highly efficient and environmentally friendly mode of transportation, particularly in areas with steep terrain or difficult-to-reach locations. We bring a wealth of multi-sectorial expertise and strategic partnerships to provide comprehensive services for ropeway projects. We offer end-to-end consultancy services to navigate the complexities of ropeway projects and ensure their success and sustainability.

## Services

Pre Feasibility / Techno-economic Viability Studies

Feasibility Studies (FS)/Detail Project Report (DPR)

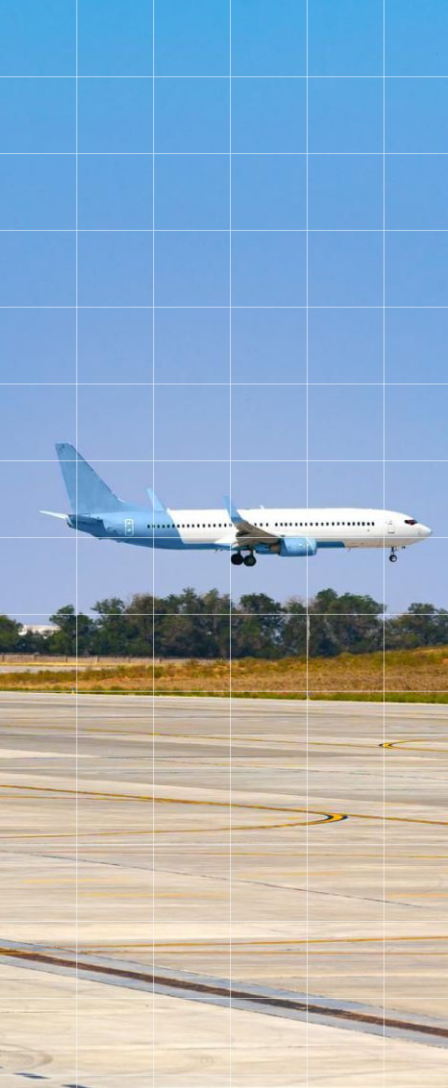
Authority's Engineer (AE) / Construction Supervision (CS)

Feasibility Projects Mention

## Key Projects

Pre-feasibility study for Development of Ropeway Projects under Parvatmala Program, 3 projects for Assam and 2 projects for Arunachal Pradesh, India

Pre-feasibility study for Development of Ropeway Projects under Parvatmala Program, 2 projects for Uttar Pradesh and 2 projects for Madhya Pradesh, India



# PORTS

Most of the movement of commodities and manufactured goods between countries takes place over the sea, making well-designed and efficient ports critical to a country's industrial growth. The Government of India has recognized the crucial role that ports play in facilitating international trade and commerce, and is actively pursuing the upgradation of the country's existing ports, and the creation of new ones.

Our expertise in the ports sector includes port and terminal feasibility studies, port planning, and container terminal planning and design.

## Services

Feasibility Studies

Detailed Project Reports

Independent Engineer (IE) & Lender's Engineer Services (LE)

Construction Supervision/Project Management Consultancy (PMC)

Technical Advisor Services (TA)

Transaction Advisory Services (TAS)

## Key Projects

LE for a Solid Cargo Port Terminal Project at Dahej, Gujarat, India

Techno-Economic Feasibility Report for the Development of Port at Astaranga Area in Puri District, Orissa, India

Detailed Design and Project Management Consultant for the construction of RoRo cum General Cargo Berth at Kamarajar Port, Tamilnadu, India

IE and operational Auditor for the construction of Gangavaram Port, Andhra Pradesh, India

Technical advisor for Providing Technical Services for construction of Oil Jetty No.7 at Old Kandla Port, Gujarat, India

Survey of Krishnapatnam Port Co. Ltd., Andhra Pradesh, India

LE for Development of Liquid Cargo Berth EQ-10 at Vizag Port, Andhra Pradesh, India

Consultancy Services for Appointment of Project Management Consultant for the Development of RORO cum General Cargo Berth at Kamarajar Port, Tamilnadu, India

Technical Advisor for providing Technical Services for the work Construction of Oil Jetty No.7 of old Kandla, Gujarat, India

TAS for selection of Port Developer for Nargol and Bhavnagar Ports, Gujarat, India



# & WATER RESOURCES & IRRIGATION

In a country where the majority of the population makes a living from agriculture, it is difficult to overstate the importance of irrigation. With changing weather patterns and climatic conditions, agriculture is one of the most affected sectors. Traditional irrigation schemes are no longer enough to provide constant reliable water supply for farmer's needs. From massive lift irrigation projects with tunnels and underground pump houses to modernisation studies of major dams, we have been at the forefront of coming up with innovative designs to meet the ever changing needs of the sector.

We provide consultancy services in the execution of large irrigation and hydropower projects involving the construction of canals, barrages, pipelines and other associated structures.

## Services

Feasibility Studies (FS) and Conceptual Designs

Detailed Project Reports (DPR)

Detailed Engineering Services

Design Proof Checking

Construction Supervision/Project Management Consultancy (PMC)

Lender's Engineering Services

Pre-Tender Engineering Services

## Key Projects

PMC, PEC & TPI covering Planning, Design Review, Quality Assurance, Monitoring and Supervision Services for 52 no of Barrages and Under Ground Pipeline system (40,000Ha) under WRD, Govt of Odisha, India.

Palamuru Rangareddy Lift Irrigation Scheme-Conducting Detailed survey & Investigations including preparation of designs, drawings and estimates upto Field channels for developing irrigation in 6,26,000 acres under Package-2, 4 & 6 and Detailed Engineering Services for Lift-1 and 4, Telangana, India

Detailed Engineering Services for Kaleshwaram Project: Package-6 (BRAPCSSP) comprising Twin tunnels of 10 m dia, 9.5km length with underground Surge Pool, Pump House, Karimnagar, Telangana, India

Final Designs for Kabuyanada Irrigation Scheme: Design of Dam and Piped Distribution Network including Socio-economic, Agro-economic & Techno-economic studies in Uganda

Concurrent Evaluation Study of Subernarekha Multipurpose Project comprising of 2 Dams, 2 barrages and 8 canal networks to irrigate a Gross Command area of 1,54,000 Ha in Jharkhand, India.

DPR for Comprehensive safety of TB Dam, Remodelling of TBP LLC Main Canal, Hydrographic survey and Sediment Analysis of TB Reservoir, Karnataka, India

Making adequate quantities of clean and safe water available to a rapidly growing population is one of the greatest challenges faced by India's central and state governments and local bodies in this century. At the same time, they must also work to minimize or mitigate the detrimental impact of industrial development and population growth on the environment

Understanding the scope and magnitude of the problem, we have built up significant expertise and experience in these sectors over the years, and are now able to formulate reliable, innovative, sustainable and in some cases, award-winning solutions to these problems. We provide consultancy services in water supply, waste water treatment and water recycling projects, and also offer services in Environmental engineering, risk management and disaster management

We provide consultancy services in water supply, waste water management, treatment and reuse, storm water management and also offer services in Environmental Services like EIA, EMP, Risk management and Disaster Management.

## Services

Conceptual Design Reports, Master Plans and Detailed Project Reports (DPR)

Project Management Unit (PMU)

Independent & Authority Engineer Services

Project Development & Management Consultant (PDMC)

Project Management Consultancy (PMC) and Construction Supervision

Third Party Quality Assurance & Control (TPQA&C)

Environmental Services including lake and river conservation studies

## Key Projects

Planning, Design, DPR and Bid Document for Comprehensive Storm Water Drainage system for Patna Nagar Nigam, Khagaul, Danapur, Phulwarisharif, Bihar, India

Setting up of a PMU in State Water and Sanitation Mission (SWSM) of 09 Revenue Divisions-Ayodhya, Azamgarh, Basti, Devi Patan, Gorakhpur, Lucknow, Prayagraj, Varanasi and Vindhyachal, Uttar Pradesh, India

PDMC for AMRUT -2.0 in Southern Zone Jabalpur and Shahdol Division's of UADD in Madhya Pradesh, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission in Karimnagar, Telangana, India

Third Party Inspection and Monitoring of Physical and Financial Progress of Rural Water Supply Projects 18 Districts in the state of Uttar Pradesh, India

TPQA&C Consultant for Water supply, Sewerage and Green Space & parks Works taken up under AMRUT in 12 ULBs under Telangana Urban Finance & Infrastructure Development Corporation Ltd. (TUFIDC), Telangana, India



# URBAN DESIGN

Increasing urbanisation has led to emphasis on creation of Sustainable Smart Urban Infrastructure. Through our extensive multi-sectorial experience, we are equipped to provide comprehensive solutions to prevalent demands of urban development. We undertake design of new cities and townships from planning to commissioning and give innovative solutions for upgrading existing cities to Smart Cities.

## Services

- Concept Design
- Feasibility Study (FS)
- Detailed Project Report (DPR)
- Tender Support
- Detailed Design of Urban Utilities
- Construction Supervision
- Project Management Consultancy (PMC)

## Key Projects

DPR and Tender Support for Shendra Industrial Smart City in the Delhi Mumbai Industrial Corridor, DMICDC, Aurangabad, Maharashtra, India

Preparation of first stage proposals for Allahabad Municipal Corporations as a part of Smart City Mission by Ministry of Urban Development, Uttar Pradesh, India

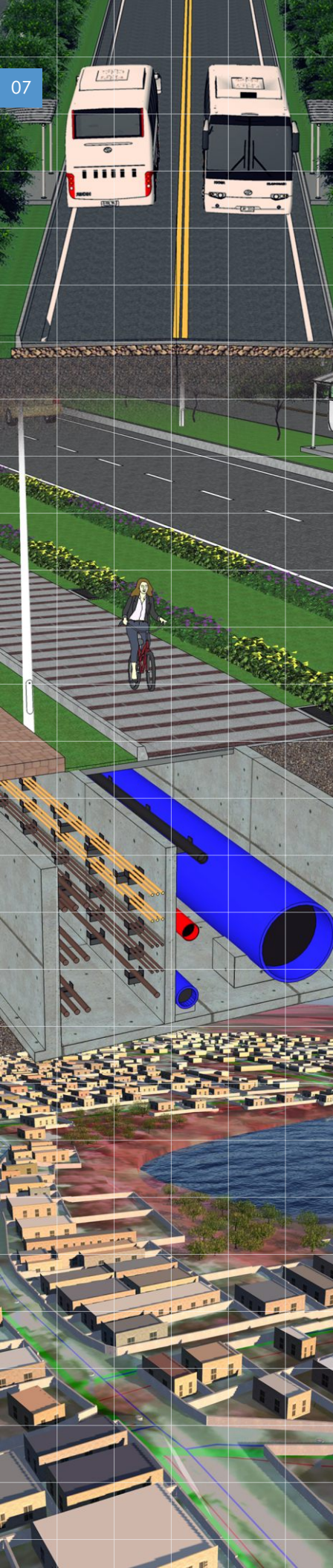
Preparation of first stage proposals for Aligarh Municipal Corporations as a part of Smart City Mission by Ministry of Urban Development, Uttar Pradesh, India

Preparation of Smart Integrated Infrastructure Master Plan and DPR for Phase-I works at Amaravati capital city area (217.00 Sq.km) for APCRDA, Andhra Pradesh, India

Preliminary Design Report for Roads and Services/Utilities and CBD for Phase-I of Shendra – Bidkin Industrail Area, Aurangabad, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission (SCM) in Prayagraj, Uttar Pradesh, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission (SCM) in Karimnagar, Telangana, India





# & ARCHITECTURE & BUILDINGS

Buildings are integral part of the urban environment. At Aarvee, functional requirements are given priority duly addressing environmental concerns while designing every building. We focus on the characteristics of the site, incorporate elements of local architecture and adopt contemporary design principles.

Over the years we have been providing consultancy services for several institutional, residential, industrial, healthcare, sports, entertainment, educational and commercial Sectors. Our work showcases our attention to detail and the importance we give to quality.

## Services

Architectural Design	Feasibility Studies (FS)
Structural Design	Detailed Project Reports (DPR)
MEP Design	Pre-Tender Services
BIM Modelling	Detailed Design
Survey & Field Investigation	PMC / CS
Master Planning	Design Proof Checking

## Key Projects

Design for International Standard Shooting Range and Rehabilitation of Existing Stadia at Different Locations in Hyderabad, Telangana, India

Design and PMC Services for AC Auditorium at Vizag Port for VPT, Andhra Pradesh, India

Design for IT Incubation Center at Tirupati for APIIC, Andhra Pradesh, IT Tower for TSIIIC In Nalgonda & Ramagundam in Telangana, India

Design for Area Hospitals at Chirala, Kuppam and Guduwada for APMSIDC, Andhra Pradesh, India

Design and PMC services for Academic block and Hostel block for Osmania University, Telangana, India

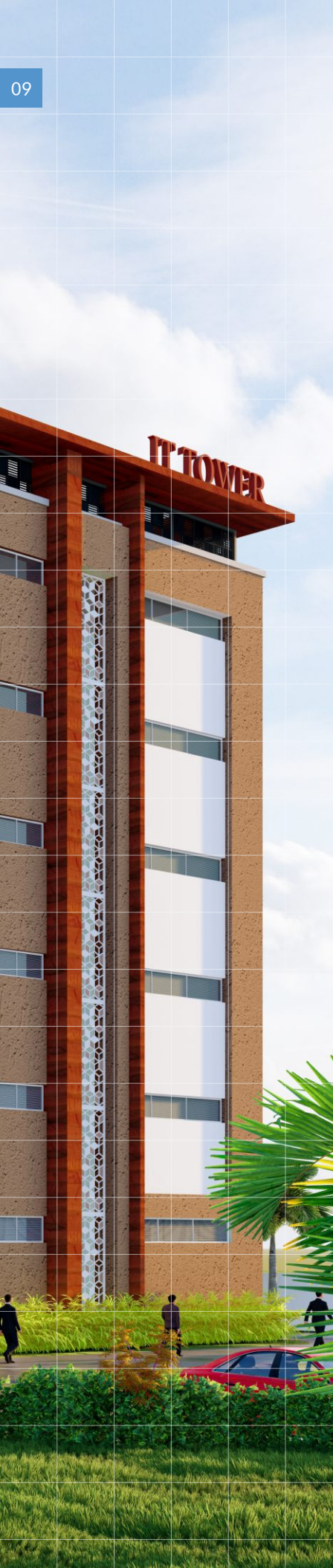
Master planning and Feasibility Report for Integrated Sports Stadia in Vizag & Tirupati for INCAP, Andhra Pradesh, India

Design Services for 1200 bedded Super Specialty Hospital Telangana Institute of Medical Sciences (TIMS) Alwal, Medchal-Malkajgiri District under BPC mode in Telangana, India

Design services for Nursing College, ITI College and CHC in Telangana for TSMSIDC, Telangana, and APMSIDC For Andhra Pradesh, India

FS, Detailed Master Planning, Urban Designing, Engineering and DPR for Major Upgradation of Vijayawada Railway Station, Andhra Pradesh, India

District Hospitals, Teaching Hospitals, Critical Case Hospitals



# GEOSPATIAL SERVICES

We offer a wide range of geospatial services to both government and private sector clients. Our expertise in the conceptualization, design and development of robust, scalable and customized geospatial solutions has made us a preferred service provider in various engineering verticals.

## Services

Interpretation of Satellite Imagery

Creation of Base Maps and Land Use Maps

Development of Web-GIS Applications and Customization of GIS Applications

Digital Photogrammetry

Network Models, Digital Cost Models, TIN and GRID Analysis

Cadastral Mapping and Land Information Systems

3D GIS

Property surveys and Digital Door numbering

## Key Projects

GIS Base Maps for 31 ULBs of Visakhapatnam & Rajahmundry Region APMDP, Andhra Pradesh (World Bank Funded), India

District Rural Road Plan (DRRP) in GIS Platform (PMGSY) for five districts of Kerala, India

Integrated Water Supply System Simulation and Design for HMWS&SB, 12 Outer Municipalities, Hyderabad, using GIS, EpaNET and Google Earth Pro, Telangana, India

GIS-based Master Plan for Sri Satya Sai Urban Development Authority, Andhra Pradesh, India

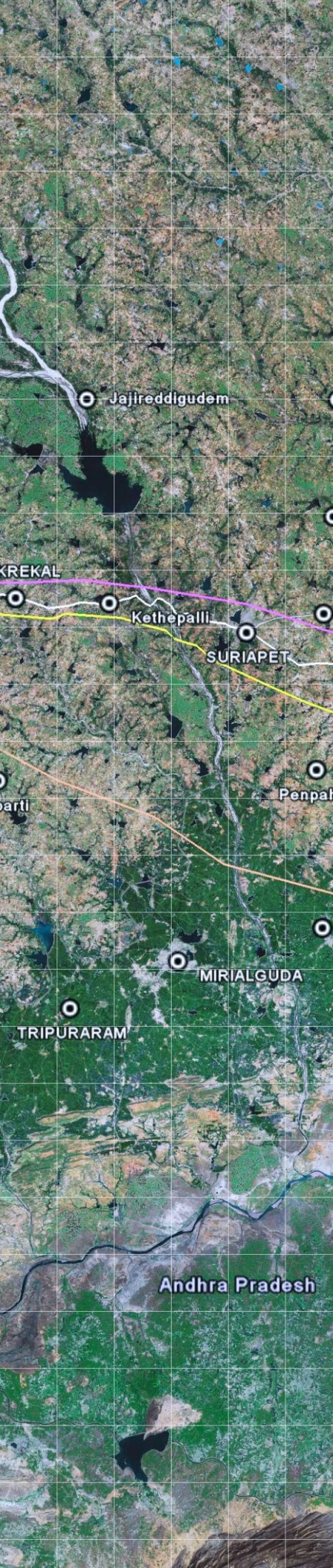
GIS-based Decision Support System for the Nagarjunasagar Command Area including the Left and Right Banks, Andhra Pradesh, India

Conducting detailed Investigation including survey of the entire catchment area of Kondaveeti vagu and its in falling drains in Guntur district, Andhra Pradesh, India

GIS Base maps of 14 Towns of Bihar, India

GIS base map, Revenue database updation survey and Rationalization of House Numbering (Digital Door numbering) 75 ULBs, Andhra Pradesh, India

GIS Basemap preparation and Formulation of GIS-based Master Plan for Cluster 8, West Bengal, India.



# POWER

The energy sector holds the key to accelerating the growth of the Indian economy. Power demand in the country is increasing rapidly due to increasing demand from the Agricultural, Industrial and Infrastructure sectors. To meet this rising demand, the Government of India is facilitating large scale additions to power generating capacity through public and private investments.

We have expertise in conducting Feasibility Studies, preparing Detailed Project Reports and providing Detailed Engineering and Project Management services.

## Sectors

Hydro Power	Hydro Pumped Storage
Solar Power	Distribution Network
Thermal Power	Transmission Lines & Substations

## Key Projects

Preliminary and Detailed Surveys of about 1200km lengths of Double & Multi circuit Transmission lines and 30km lengths of Pole type distribution lines in the states of Telangana, Andhra Pradesh, Karnataka, Madhya Pradesh, India under TSTRANSCO, APTRANSCO, KPTCL and MPPTCL, India (respectively)

Identification of site, Feasibility study and Detailed Project Reports for establishment of Pumped Storage hydro electric Projects (PSP) and Hydro Power Projects including topographical surveys, Geological & Geo-technical Investigations, Seismic Studies, EIA & EMP Studies, SIA Studies for :

- Pinnapuram PSP (Andhra Pradesh) – 1200MW
- Saundatti PSP (Katakana) – 1260MW
- MP30 Gandhisagar PSP (Madhya Pradesh) – 1440MW
- Chitravathi PSP (Andhra Pradesh) – 500MW
- Yerrvaram PSP (Andhra Pradesh) – 1200MW
- Bhavali PSP (Maharastra) – 1500 MW
- Gujjili PSP (Andhra pradesh) – 1500 MW
- Chitterwalasa PSP (Andhra Pradesh) – 1000 MW
- Vempalli PSP (Andhra Pradesh) – 1500 MW
- Veeraballi PSP (Andhra Pradesh) – 1800 MW
- Ranapur PSP (Telangana) – 1200 MW
- Pane PSP (Maharastra) – 900 MW
- Kandhaura PSP (Uttar Pradesh) – 1200 MW
- Nagarjuna Sagar PSP (Andhra Pradesh) – 240MW
- Upper Sileru PSP (Andhra Pradesh) – 900MW
- Pulichintala HPP (Andhra Pradesh) – 60MW

# SURVEY

Reconnaissance survey – Walk through /Inventory

Engineering Survey – Roads, Rail, Irrigation, Power, Water Supply & Sewerage, Buildings

Topographical Survey – Collection of Ground Features / Grid Levels

Catchment Survey – Contours , Ridges and Valleys demarcation

Command area Survey – Grid Levels, Ground Features, Ridges and Valleys demarcation

Cadastral Survey – Land acquisition Survey and Land Parcel mapping

Asset mapping survey - Measurement and Mapping of Physical features

Hydrographic/Bathymetric Survey – River/Reservoirs under water survey

Final Location Survey – Alignment Stakeout

Aerial LiDAR Survey – Roads , Rail, irrigation, Catchment , Command area

Aerial Photography/ Videography by UAV/Aircraft – Corridor mapping, Large scale mapping, Progress monitoring.

Mobile LiDAR Survey – Road, Rail, Telecommunications

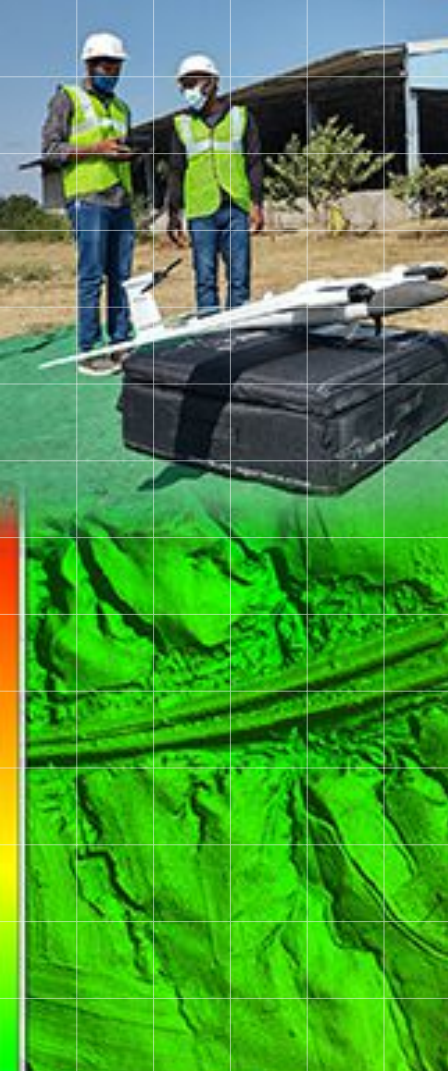
## GEOTECHNICAL & MATERIAL TESTING



We have a wide range of testing facilities for Soil, Rock, Cement, Concrete, Coarse & Fine Aggregate, Fly ash and Bitumen, fulfilling most civil engineering requirements including Shear Parameters, Consolidation parameters, Permeability and Swelling characteristics of different types of soil. We also undertake Geophysical Investigations (SRT & MASW) and Ground Penetrating Radar (GPR) for utility engineering purpose are also available.

Field investigations comprising of Pavement Structural Strength using FWD/ BBD; Road Roughness using Fifth-wheel Bump Integrator/Laser Profilometer; Road Geometry, Inventory, Pavement Condition using Network Survey Vehicle (ROMDAS), Retrorefletometer (RRM) for measurement of Reflectivity of Road Signs and Pavement markings; ATCC for classified traffic counts on highways.

All test procedures and techniques adhere to IS, BS, AASHTO & ASTM standards.



# EMPANELMENT

We are empaneled with various government and other agencies.

Allahabad Bank	Ministry of Housing & Urban Poverty Alleviation, Govt. of India
Andhra Pradesh Capital Region Development Authority	Maha Metro
Andhra Pradesh Industrial Infrastructure Corporation Limited	Nagpur Improvement Trust
Dedicated Freight Corridor Corporation India Ltd	Odisha Urban Infrastructure Development Fund
Department of Tourism & Culture, Odisha	Odisha Construction Corporation Limited
Department of Urban Development, Housing and Local Self Government, Rajasthan	Osmania University, Hyderabad
Directorate of Urban Administration and Development, Madhya Pradesh	Panchayat Raj Engineering Department, Karnataka
Directorate of Town & Country Planning, Andhra Pradesh	Public Works Department, Maharashtra
Environmental Planning & Coordination Organisation, Madhya Pradesh	Punjab Remote Sensing Centre
EXIM Bank of India	Rail Vikas Nigam Limited
Gujarat Infrastructure Development Board	Rail Land Development Authority (RLDA)
Gujarat Maritime Board	Rural Water Supply & Sanitation, Odisha
Indian Ports Association	State Bank of India
Indian Railways	State Institute of Town Planning, Madhya Pradesh
Irrigation & CAD Department, Andhra Pradesh	Tamil Nadu Infrastructure Development Board
Irrigation & Water Resources Department, Haryana	Tamil Nadu Urban Infrastructure Financial Services Limited
Karnataka Industrial Area Development Board	Telangana State Medical Services & Infrastructure Development Corporation
Karnataka Neeravari Nigam Limited	Telangana State Police Housing Corporation Limited
Madhya Pradesh Jal Nigam Maryadit	Uttarakhand State Infrastructure Development Corporation Limited
Maharashtra Rail Infrastructure Development Limited	Uttar Pradesh State Bridge Corporation Limited
Ministry of Housing & Urban Affairs, Govt. of India	Yadagirigutta Temple Development Authority
Ministry of Urban Development, Govt. of India	Ministry of Urban Development, Govt. of India

## GLOBAL PRESENCE



# SELECTED CLIENTELE

## INDIAN

Adani Group
Andhra Pradesh Capital Regional Development Authority (APCRDA)
Andhra Pradesh Urban Finance & Infrastructure Development Corporation Limited (APUFIDC), Hyderabad
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)
Central Organization for Railway Electrification (CORE)
Central Public Works Department (CPWD), New Delhi
Chhattisgarh Rail Corporation Limited
Dedicated Freight Corridor Corporation of India Limited, New Delhi
Department of Water Resources, Government of Orissa
Directorate of Town and Country planning, Telangana
Directorate of Town and Country Planning, Government of Andhra Pradesh
Greater Hyderabad Municipal Corporation, Hyderabad
Hyderabad Growth Corridor Limited, Hyderabad
Hyderabad Metro Water Supply & Sewerage Board (HMWS&SB), Hyderabad
IRCON International Limited, New Delhi
Irrigation & CAD Department, Government of Andhra Pradesh
Jindal Steel & Power Limited, Orissa
KMC Constructions Limited, Hyderabad
Lucknow Metro Rail Corporation Limited (LMRCL)
Maharashtra Rail Infrastructure Development Limited (MRIDL)
Ministry of Road Transport & Highways (MoRTH), New Delhi
Nagarjuna Construction Company Limited, Hyderabad
National Highways Authority of India (NHAI), New Delhi
Navayuga Engineering Company Limited, Hyderabad
Public Health Engineering Department, Bhopal, Madhya Pradesh
Punjab Land Records Society, Chandigarh
Rail Vikas Nigam Limited, New Delhi
SEW Infrastructure Limited, Hyderabad
Sports Authority of Andhra Pradesh, Vijayawada
Survey Settlements and Land Records, Andhra Pradesh
Tata Projects Limited
Urban Administration and Development Department, Government of Madhya Pradesh

## INTERNATIONAL

Administracao Nacional de Estradas (ANE), Mozambique	Fulton Hogan, Australia
Bangladesh Railway	Kenya Railways
Ethiopian Roads Administration	Ministry of Water and Environment, Uganda
Ethiopian Railways Corporation	Tanzania National Roads Agency
Energy Water & Sanitation Authority (EWSA), Rwanda	Uganda National Roads Authority



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