

Project Case Studies-

- 1. Ground Lighting System for Airport Authority of India**
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Ground Lighting System for Airport Authority of India



Project For -

The Airports Authority of India (AAI) was formed on 1st April 1995 by merging International Airports Authority of India and National Airports Authority with a view to accelerate the integrated development, expansion and modernization of operational, terminal and cargo facilities at the airports, conforming to international standards.

SpanDigit has provided GIS solutions to several airports under AAI. Huge infrastructure & multiple networks contribute to operational efficiency of airports along with customer needs and satisfaction.

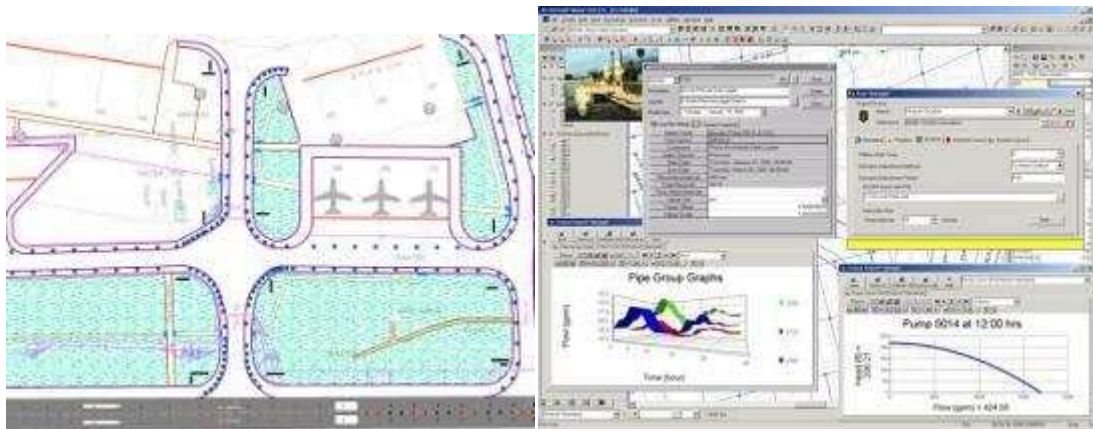
Nature of the Project -

Where operational area is concerned, runway is an integral part. Here, the electrical department plays a crucial role. Lighting systems on runway guides the pilot and the flight therefore this system is of a critical nature. The lights installed on the runway guide the flights to a proper landing and take-off, so if there is a problem even with a single light, it has to be solved immediately.

Methodology -

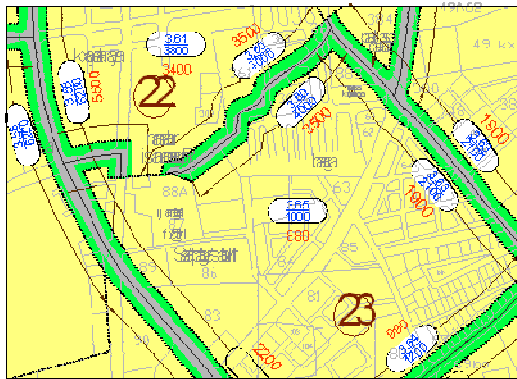
This particular project started with a phase of runway survey. After surveying the lighting systems on the entire runway, data was mapped. Software application system namely AGLS (Airport Ground Lighting System) was developed to access information associated with every single light. This helped electric maintenance department in operating smoothly, efficiently and in a timely manner.

By developing an entire information system based on maps, any user can now find the circuit on which a particular light is dependent. Software animates the current flow and makes it easy for everybody to understand the routes of cables and direction of the electricity flow. This application is not only useful for the maintenance personnel but also for the planning department. The graphical search enables users to get to details such as the nearest distribution box's location, area of planning within the given fence and much more.



In this project we have digitized **land of 22,000 Ha with the 19 different layers**. We have maintained this data for the next 5 years. In this maintenance period we updates stock details every year with respect to features like water holes, medicine plants, important species, etc., generated from forest survey by surveyors.

Map Production & Data Capture for Town Planning Department



Project For -

Town Planning department of Valuation is responsible for deciding government valuations for lands in Urban & Rural areas. Based on these values government collects duties for transactions of land. There are four categories involved: Municipal Corporation, Municipal Councils, Influence Zones and Rural Areas. Based on these categories all the towns of all the districts are divided.

Nature of the Project -

We have developed thematic maps for all villages in five districts. There are 45 Taluka in these 5 Districts, each containing 30-40 villages. The map explains the rates of specific survey number or the property you are interested in dealing with. Because of the thematic presentation it also helps decision makers to understand direction of growth of the city.

Methodology -

The source for these maps was base maps of villages from the Town Planning Department & Data Sheets regarding rates; those printed in book format and the zone maps. These three documents were related and maps were prepared.

Master Planning & Utility Management Solution to Vipassana Research Institute



Project For -

Vipassana Research Institute (VRI) was established in 1985 for the purpose of conducting research into sources and applications of Vipassana Meditation Technique. VRI is adjacent to the Vipassana International Academy (VIA), known as Dhamma Giri located in Igatpuri, a small town about 136 km from Mumbai in the state of Maharashtra, India.

The Academy is one of the world's largest centers for the practice of Vipassana, offering on-going 10 days meditation courses, serving up to 600 people per course, throughout the year.

SpanDigit proudly provided GIS solution to a noble organization like this.

Nature of the Project -

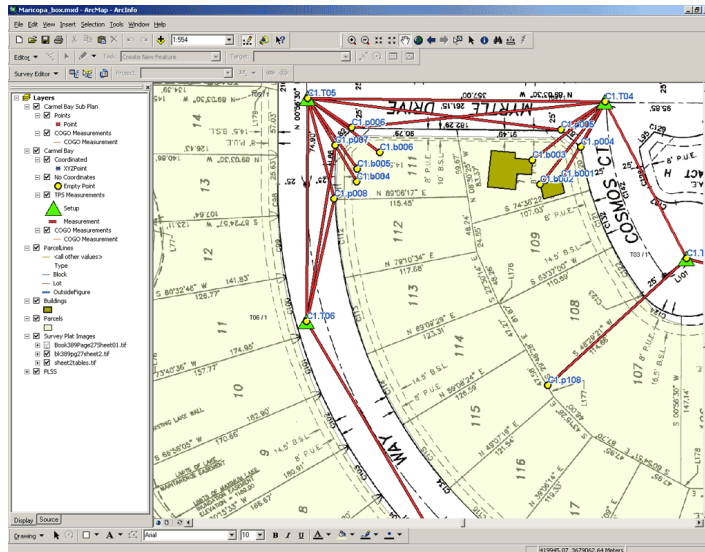
As the Organization was founded many years back & grown in stages according to requirements, infrastructural scenario depicted different building structures situated on huge area of land. The entire property is around 2, 65,500 square meters. And construction is on about 40, 000 square meters.

There was a need to revise property drawings as buildings were too old, also lot many changes had occurred in property through the years. Therefore, amendments were essential. Additionally, for effective property management GIS solution was essential.

Methodology -

SpanDigit provided solutions for property management, right from detailed property survey. Plane table survey was a technique employed for this survey. The entire property was surveyed & mapped. Master planning of entire property was executed and spatial attention was given on utility management. Then, utilities were captured in digital format & software application was developed to visualize network path. Software was embedded with several features & embedded with a capacity to highlight network to the source.

Infrastructure Mapping for the State Electricity Board



Project For -

SpanDigit has had the opportunity to provide GIS map solution to MSEB (Maharashtra State board of electricity) successfully. MSEB wanted to locate & map all Distribution Panels in entire Nashik City. These Distribution Panels are originated from Feeders.

Nature of the Project -

Skilled professional efforts were expected to complete the project. For this project the entire city map was prepared at first. Nashik City map had been prepared inclusive of all urban regions coming under the scope like Vilholi, Adgaon, Deolali, MERI etc.

Methodology -

To know the location & position of each & every Distribution panels spread in the city, a walk down survey was carried out. Basic purpose of this survey was to understand the electric distribution system of MSEB in Nashik's Urban Region. During this survey Electricity distribution path from Substation to Feeders & from Feeders to Distribution panels was critically observed & mapped.

Entire data was compiled & Nashik Urban Region Map consisting of all Distribution Panels was prepared. This map was delivered in different layers as per requirement. Map of only substations & only feeders were also prepared & delivered.

