

Industry: Buildings

Products: InRoads, GEOPAK, MXROAD, MicroStation, Haestad, Bentley Map, STAAD

User: Tata Consulting, Ltd.

Country: India

November 2, 2015

Tata Consulting Engineers Builds Jain SRM Ashram for 100 Years of Sustainability Using Bentley Software

To help design the infrastructure for the Jain SRM Ashram, a spiritual healing center in Dharampur, India, Tata Consulting Engineers Ltd. used Bentley software. Tata Consulting's goal was to complete the project at optimal cost, utilize Smart concepts for energy efficiency and space utilization, and build for 100-year sustainability.

Faced with a challenging site of varying steep terrain slopes, Tata Consulting used 3D terrain models to assist in decisions for land use planning and detailed design of the INR 1.8 billion international headquarters and ashram. Tata used Bentley software to create concept level "optioneering" alternatives, to develop schematic level design, and to complete detailed design. Advanced 3D modeling and project collaboration were essential in reducing project costs and time.

The team also had to plan for considerable pedestrian traffic of up to 8,000 visitors per day. Tata Consulting Engineers used Bentley's MicroStation, Bentley Map, GEOPAK, InRoads, MXROAD, STAAD, and Haestad products which helped reduce the cost of project delivery. Tata also used the solution to perform cost-benefit analyses to arrive at the best design to minimize maintenance and ensure efficient operation.

The project scope included establishing the Master plans to assist the project architects and planners in:

- Effective utilization of terrain for placing buildings and roads
- Establishment of an effective utility infrastructure master plan
- Detailed design of infrastructure such as:
 - Water, waste water, rain water collection, recharge, storm water, site grading
 - Solid waste management
 - Retaining structures
 - Cut and fill (structures, roads and other areas as required)
 - Parking management
 - Road Network and pavements
 - Traffic and pedestrian planning



Image Link: <https://www.hightail.com/download/bXBibUpZeDNIM1IzZU5Vag>

Caption: Jain SRM Ashram, Tata Consulting Engineers



Quote:

"Bentley's commitment to providing the tools necessary for 3d detailed design of our many project data which is effective and well-coordinated."

Sandeep Zade, Asst. General Manager TATA Consulting Engineers LTD

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