

Brazilian Civil Engineering Firm Figueiredo Ferraz Earns Autodesk BIM Experience Award

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Multidisciplinary Transportation, Infrastructure and Urban Development Projects Demonstrate Integrated Building Information Modeling (BIM) Process

SAN RAFAEL, Calif., Mar 10, 2010 (BUSINESS WIRE) -- Autodesk, Inc. (NASDAQ: ADSK), a world leader in 2D and 3D design, engineering and entertainment software, announced that Figueiredo Ferraz, one of Brazil's foremost engineering companies, has been selected to receive an Autodesk BIM Experience Award for its application and promotion of Building Information Modeling (BIM) as a process for large-scale government projects.

The award also recognizes the firm's use of <u>AutoCAD Civil 3D</u> software for all of its current civil engineering projects; <u>Autodesk Revit Structure</u> software for bridge, viaduct and tunnel design projects; as well as <u>Autodesk 3ds Max Design</u> software for visualizations.

"More than 20 years ago we were one of the first civil engineering firms in Brazil to implement <u>AutoCAD</u> software, and in 2008 we adopted BIM to deliver maximum value to our clients," said Marcos del Nero Millan, engineer and IT manager at Figueiredo Ferraz. "Today we rely on Autodesk BIM software for all of our transportation, infrastructure and urban development projects. BIM has helped us maintain our reputation for delivering innovative solutions for complex engineering challenges that minimize impact on the environment."

Large-Scale Watershed Project Demonstrates Exemplary Application of BIM

One of the firm's recent BIM process-based projects targets environmental recovery for the Sapolandia, Franco and the Quarenta watercourses in Manaus, Brazil. Currently under construction, this government project will protect these watersheds and improve the quality of life for nearby residents and businesses. The project includes urban renewal of the land adjacent to the watercourses, implementation of drains and sewer systems, and construction of bridges and pedestrian overpasses.

The Figueiredo Ferraz design team used AutoCAD Civil 3D software to develop several sustainable design alternatives for both watercourses, including plans for watercourse channeling, drainage systems and traffic circulation. The team aggregated existing geographic information system (GIS) and survey data in a BIM-based design model to efficiently create, visualize and evaluate design options. BIM design processes enabled the team to react more quickly to design decisions and changes, helping to keep the construction on schedule and avoid downtime when seasonal flooding of the Amazon limits waterfront construction. BIM was also valuable for cross-disciplinary design coordination with the project architect and other members of the extended design team. In addition, the team transferred its design models into 3ds Max Design software to create project visualizations for design reviews, approvals and public outreach efforts.

About BIM

BIM is an integrated process for exploring a project's key physical and functional characteristics digitally before it's built, helping to deliver projects faster and more economically, while minimizing environmental impact. Coordinated, consistent information is used throughout the process to design innovative projects; better visualize and simulate real-world appearance, performance and cost; and create more accurate documentation.

About Figueiredo Ferraz

Founded in 1941, Figueiredo Ferraz is an award-winning civil engineering firm. Notable projects include the subway systems in São Paulo, Rio de Janeiro, Lisbon and Caracas; the Immigrants' Highway in Brazil; and bridges over the Orinoco River in Venezuela. In addition to the recent environmental recovery project for the Sapolandia and Franco watercourses in Manaus, Brazil, the firm's current BIM projects include the new ring road surrounding São Paulo and new stations and tunnels for São Paulo's subway expansion.

About Autodesk

Autodesk, Inc., is a world leader in 2D and <u>3D design</u>, engineering and entertainment software for the manufacturing, building and construction, and media and entertainment markets. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of stateof-the-art software to help customers experience their ideas digitally before they are built. Fortune 100 companies -- as well as the last 15 Academy Award winners for Best Visual Effects -- use <u>Autodesk software</u> tools to design, visualize and simulate their ideas to save time and money, enhance quality and foster innovation for competitive advantage. For additional information about Autodesk, visit <u>http://www.autodesk.com/pr-autodesk</u>.

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