



Atkins and Skanska Balfour Beatty Joint Venture Earn Autodesk BIM Experience Award

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Team Uses Building Information Modeling to Widen M25 Motorway and Add Greater Traffic Capacity Before the London 2012 Olympic Games

SAN RAFAEL, Calif., Apr 14, 2011 (BUSINESS WIRE) --

[Autodesk, Inc.](#) (NASDAQ:ADSK), a leader in [3D design](#), engineering and entertainment software, announced that [Atkins](#) and [SkanskaBalfour Beatty](#) Joint Venture have been selected to receive an [Autodesk BIM Experience Award](#). The firms are being honored for using a [Building Information Modeling](#) (BIM) process to meet the demands of widening 64 kilometers (40 miles) of the 188 kilometer (117 miles) M25 highway that circles London, in preparation for the 2012 Olympic Games.

The award recognizes Atkins and Skanska Balfour Beatty Joint Venture for the exemplary use of a BIM process to:

- Inform decision-making for improved safety
- Foster better understanding of the design among project engineers
- Coordinate design disciplines and resolve inter-disciplinary conflicts prior to construction, reducing potentially costly errors
- Virtually plan production to meet a fast-track schedule while maintaining ongoing operations on a busy highway

Since 2009, the design-build team has used Autodesk BIM solutions to collaborate on the project, helping to resolve construction issues virtually before they happen in the field. Autodesk software solutions used to support this BIM process include [AutoCAD](#), [Autodesk Navisworks Manage](#), [Autodesk Navisworks Freedom](#), and [AutoCAD Civil 3D](#) software.

"Our project team members use Autodesk BIM solutions for collaboration and design coordination to help meet the challenge of adding a lane to these sections of the busy M25 motorway, with the goal of minimizing disruption to the current traffic flow of three lanes in each direction," said Bob Marlow, project manager, Atkins. "The models produced are facilitating a more coordinated and complete design."

"Using AutoCAD and AutoCAD Civil 3D to enhance a Navisworks virtual construction model helps us resolve construction issues before they happen on site," said David Owens, engineer, Skanska Balfour Beatty Joint Venture. "This process gives the construction team a better appreciation of the overall design and helps identify and resolve inter-disciplinary clashes."

Autodesk Navisworks Integrated Design Model Key to Success

To help meet the aggressive design-build schedule, the project team relies on a coordinated, accurate design intent model. The Autodesk Navisworks integrated design model helps the team visualize the entire project, including all above and below ground components, as well as non-physical aspects of the design, such as safety barrier working zones. The designers use Navisworks software to help identify and correct clashes that otherwise would be very difficult to detect using 2D documentation.

Following release of the design to site, the project team adapts the Autodesk Navisworks design model to create a construction model. Using AutoCAD Civil 3D software, the team enhances the design intent model to create a virtual construction model that incorporates additional elements, such as a more realistic visualization of the new retaining walls, point clouds from laser scanning and temporary works. When necessary, the designer's site representative team updates the construction model to better reflect on-site design changes.

The extended project team, including onsite construction personnel, can view the construction model from their temporary offices using Autodesk Navisworks Freedom software. The use of a consolidated, more accurate construction model means everyone is accessing the same up-to-date, realistic project information when assessing how best to perform construction tasks.

About Autodesk BIM Solutions

Building Information Modeling is an intelligent model-based process that provides insight for creating and managing building and infrastructure projects faster, more economically and with less environmental impact. Autodesk BIM solutions for the building lifecycle, from design to construction and operations and maintenance, are based on intelligent models created with Autodesk [Revit](#) software, including solutions for architecture, structural engineering, and mechanical, electrical, and plumbing (MEP) engineering. Autodesk BIM solutions for the infrastructure lifecycle are based on intelligent models created with AutoCAD Civil 3D software for civil engineering design and [AutoCAD Map 3D](#) software for infrastructure planning. Helping to expand the benefits of BIM is a powerful set of complementary solutions, including Autodesk Navisworks and Autodesk [3ds Max Design](#) to visualize and simulate projects virtually, and AutoCAD software for documentation and professional drafting. Autodesk [Vault](#) Collaboration AEC helps project teams manage and track digital models; secure, organize, and access project documentation; and facilitate team collaboration.

About Connect Plus, Atkins and Skanska Balfour Beatty Joint Venture

Balfour Beatty, Skanska, Atkins and Egis Road Operation UK, make up the [Connect Plus consortium](#), which has been awarded a design, build, finance and operate (DBFO) contract for Area 5. Area 5 includes the M25, the A282 Dartford Crossing and sections of the radial routes (like the M1, M3, M4 and M11) which cross the M25. The DBFO contract provides for the day-to-day maintenance work for the motorways and trunk roads in the Highways Agency Area 5, plus the Dartford Crossing over a 30-year period. As part of the DBFO, the team comprised of Skanska Balfour Beatty joint venture, with Atkins as the lead designer, will build the widening between junctions 16-23 and 27-30 of the M25 motorway.

[Skanska](#) is one of the world's largest project development and construction groups, with expertise in construction, development of commercial and residential projects, and public-private partnerships.

[Balfour Beatty](#) is a world-class infrastructure services business operating across the infrastructure lifecycle with strong positions in major world

markets.

[Atkins](#) is the UK's largest engineering and design consultancy and the world's 11th largest design firm. Whether it's the concept for a new skyscraper, the upgrade of a rail network, the modeling of a flood defense system or the improvement of a management process, Atkins plans, designs and enables solutions.

Skanska Balfour Beatty Joint Venture uses [Graitec UK Ltd](#), in Weybridge, Surrey as its reseller; Atkins uses [CADline Ltd](#) in Staines, Middlesex.

About Autodesk

Autodesk, Inc., is a leader in [3D design](#), engineering and entertainment software. Customers across the manufacturing, architecture, building, construction, and media and entertainment industries -- including the last 16 Academy Award winners for Best Visual Effects -- use Autodesk software to design, visualize and simulate their ideas. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of state-of-the-art software for global markets. For additional information about Autodesk, visit www.autodesk.com.

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