

Building Information Modeling – Don't Go It Alone

Building Information Modeling (BIM) has grown in popularity due to its ability to streamline the construction process, enhance communication and reduce design conflicts, RFIs and change orders. It can, therefore, be considered a positive advancement in technology, facilitating a general industry transformation toward a more collaborative approach to project delivery. However, as its use increases, A/E's must remain cognizant of BIM's potential consequences both in terms of design and relationships among project stakeholders. Here are several measures that will aid in your transition to BIM.

ANTICIPATE THE TIME AND EXPENSE OF IMPLEMENTING BIM

Technology research and acquisition must be properly managed and training should be regarded as a continuous process. Your staff will also need to become proficient in other areas, such as cost and quantity estimates. Project management skills will become even more important, especially in the areas of team building, coordination, conflict resolution and communication.

DISCUSS RISK AND EXPECTATIONS WITH YOUR CLIENTS

Make sure your client has a thorough understanding of what BIM entails and how it can

alter the normal course of a project. Your client's requirements and expectations should be fully articulated and documented during the programming phase.

USE YOUR TWO-PARTY CONTRACT TO ADDRESS POTENTIAL PROBLEMS

Consider how you will use BIM on each project. Will you use the approach only internally or from the design phase right through construction? How many other parties will you collaborate with to develop the model? Determine the format, version and use of BIM-generated documents in advance. Add a "no third-party beneficiary" clause and use a strongly worded provision or letter of agreement that helps protect you against unauthorized changes or reuse. Also include language that preserves your right to rely on information provided by others without performing excessive checking.

CONSIDER USING A PROJECT-WIDE AGREEMENT FOR ALL COLLABORATING PARTIES

Define each party's duties and responsibilities and allocate an appropriate portion of risk to each party based both on the party's ability to control risk and the benefits the party stands to receive. Spell out what constitutes the "design." Consider a mutual waiver of consequential

damages due to errors in the model. Specify who retains ownership of models, drawings and other instruments of service and who will host, or manage, the model. List the permissible downstream uses of the digital data and the permitted re-use of the data developed in the model's design. The contract should also address security, access, archiving and document tracking, and specify the software platform, data format and version to be used by all parties.

CREATE AND FOLLOW BIM PROCEDURES FOR YOUR PROJECTS

Set up standard procedures for transmitting electronic documents, including logging all files sent and received and maintaining backup copies. Retain "snapshot" copies of all transferred data. And don't let your use of BIM override your regular protocol of design checks and quality controls.

DOCUMENT ALL DESIGN DECISIONS

If a dispute arises, you'll need to demonstrate that you exercised due diligence. Documenting your design decisions prepares you for this possibility and can help bring a dispute to a quick and equitable resolution.

DON'T GO IT ALONE

To properly educate yourself about the potential liability exposure resulting from BIM, speak with your attorney and your liability insurance agent. Make sure there are no gaps in your coverage.

This article has been provided as a courtesy educational service of the Design Professional group of the XL Insurance companies using information contained in the *XL Insurance Contract Guide for Design Professionals: A Risk Management Handbook for Architects and Engineers* published in 2007. For additional information on this or other professional liability topics visit www.xldp.com.



XL Insurance
Design Professional Group
30 Ragsdale Drive
Suite 201
Monterey CA 93940-7811
800-227-8533 ext.210-2508
www.xldp.com

"XL Insurance" is a registered trademark of XL Capital Ltd. XL Insurance is the global brand used by member insurers of the XL Capital Ltd. group of companies. Coverages are underwritten by Greenwich Insurance Company, Indian Harbor Insurance Company, XL Specialty Insurance Company, and XL Insurance Company Limited – Canadian Branch. Coverages not available in all jurisdictions.

© 2008, X.L. America, Inc. All rights reserved. This article may be reproduced only with written permission from X.L. America, Inc.