legal issues of interest to structural engineers

BIM! You've Been Sued!



Tt has not happened yet. To date, no law $oldsymbol{1}$ suit has been filed based upon the use of Building Information Modeling (BIM) in a project. But it will. It's only a matter of time. Up until recently, BIM has mostly been used as a design tool in experimental, high profile, complex construction projects like the Freedom Tower at the former World Trade Center site, the London Hospital project, and refurbishment of the Sydney Opera House. Now, however, the federal government has mandated minimal use of BIM for all major projects receiving design funding. As BIM becomes more integrated in design and construction processes, and more prevalent in day-to-day projects, litigation is bound to ensue over things like misunderstandings of the relative risks and responsibilities of the parties.

New Contract Forms Have Evolved

One way to address such misunderstandings is to spell out the relative risks and responsibilities relating to BIM in the project contracts. Recently, the American Bar Association Forum on the Construction Industry presented the ConsensusDOCS 301 BIM Addendum to address incorporating BIM into contracts between project participants. The addendum seeks to provide contractual answers to the questions raised by BIM users, such as: Does the use of BIM alter the traditional allocation of responsibility and liability exposure among owners, designs, contractors and suppliers? What are the risks of sharing digital models with other parties? Does the party managing the modeling process assume any additional liability exposure? How should intellectual property rights be addressed? (Larson & Golden)

To answer these questions, the addendum sticks closely to the traditional roles, responsibilities and risks of document-based design and construction. Perhaps, most importantly, using an addendum to the owner-designer By Julie B. Negovan, Esq.

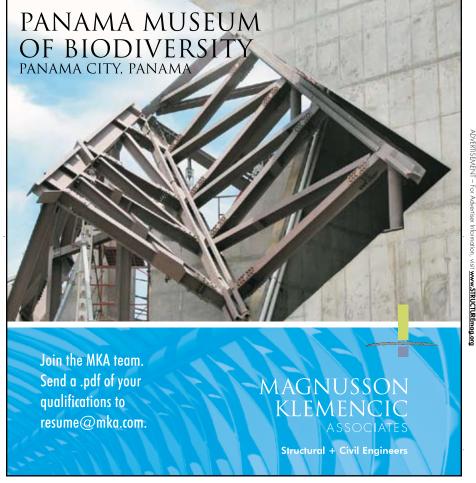
contract and/or the owner-builder contract preserves designer and builder privity with the owner but does not create any new privity between designer and builder. Similarly, the addendum can be used with traditional project delivery methods, such as designbid-build and guaranteed maximum price. In addition, the addendum incorporates the "Construction Document" concept and applies it to the "Models" (capital "M") created by the participants in BIM.

BIM-unique concepts are incorporated into the addendum by defining "Information Management." Based upon the National Institute of Building Standards, the addendum incorporates best practices in the exchange and management of electronic data. By default, the owner is responsible for the costs associated with Information Management, but the responsibility can be assigned to any one of the project participants.

The addendum also addresses Intellectual Property Rights. Participants warrant that they have the rights to the information they contribute and that they will indemnify others for claims arising from their use of the contributed information. Each party grants a limited, non-exclusive license to reproduce, distribute, display or otherwise use that party's contributions for the purposes of the project only.

The addendum also includes a BIM Execution Plan, which provides flexibility to the parties in allocating specific responsibilities and requirements associated with project-specific use of BIM. One of the most important elements of this plan is the participant's representation with regard to the dimensional accuracy of the participant's contributions. This provides certainty regarding the level of reliance participants may place on data in the models.

continued on next page



Common Law Evolves Too

Nevertheless, execution of the BIM Addendum will not insulate participants from litigation. If a project goes south, lawsuits will fly. Even though there is no contractual privity between the designer and contractor, in litigation, there will be claims between them. One of the bases upon which such claims rest is "negligent misrepresentation." Section 552 of the Restatement of Torts (Second) provides in part that "[o]ne who, in the course of his business, profession or employment, or in any other transaction in which he has a pecuni-

ary interest, supplies false information for the guidance of others in their business transactions, is subject to liability for pecuniary loss caused to them by their justifiable reliance upon the information, if he fails to exercise reasonable care or competence in obtaining or communicating the information."

As an example, Pennsylvania courts have applied this tort in the context of a construction project dispute. In <u>Bilt-Rite Contractors</u>, <u>Inc. v. The Architectural Studio</u>, 866 A.2d 270 (Pa. 2005), the Pennsylvania Supreme Court acknowledged prior case law which stated that a contractor cannot prevail against

an architect for economic damages suffered as a result of negligence in drafting specifications, absent privity of contract between the contractor and the architect. Nevertheless, the court found that a contractor may maintain a negligent misrepresentation claim against an architect for alleged misrepresentations in the architect's plan where the contractor reasonably relied on the misrepresentations in submitting its winning bid, and consequently suffered purely economic damages as a result of that reliance.

Not only is the risk of liability implicated by a negligent misrepresentation claim, but when litigation ensues in a BIM project, discovery of electronic data in the BIM systems will need to occur. Discovery of Electronically Stored Information (ESI) has become a cottage industry for lawyers and technology experts, primarily because of the expertise and commiserate costs associated with harvesting, reviewing and producing relevant ESI. The Federal Rules of Civil Procedure, as well as various state court procedures, have recognized and codified the duty of parties to preserve electronic information and produce it in the discovery process. Courts have issued severe sanctions to parties failing to comply with ESI discovery rules. Taking into consideration the new rules concerning electronic discovery, the use of BIM in construction projects will exponentially increase the costs associated with litigation between project participants, making clarity in the contractual relationship even more important.

We Must Adapt As Well

The evolution of technology, the use of BIM in the construction process, the contractual relationships between project participants who use BIM and the world of litigation will continue to influence how BIM is used moving forward. It is important for those involved in shaping this evolution to continue to assess the interrelationships of these variables and prepare for the fact that more technological advances are inevitably on the horizon.

Julie B. Negovan is a member of the construction industry practice at Cozen O'Connor in Philadelphia, Pennsylvania. For more information, contact Julie B. Negovan at JNegovan@cozen.com.

Reference

Dwight A. Larson & Kate Golden, *Entering the Brave New World: An Introduction to Contracting for BIM*, 34 Wm. Mitchell L. Rev. 75,77 (January 2008).

Varco Pruden Buildings

Deck•Frame

The first framing system designed to use a membrane roof on a metal building







VP's Deck • Frame solution allows architects to effectively combine the economy and speed of systems construction with the aesthetics and functionality of fully adhered membrane, ballasted and mechanically attached membrane roof systems. Deck • Frame, as part of a metal systems approach, offers architects and owners several advantages.

- Adapts to wall alternatives such as block, tilt-wall, wood or masonry.
- Can be used with either bar joist, purlins or WideBay™.
- Can be incorporated with other architectural features including metal facades and canopies.

For information about Deck • Frame or other VP products, talk with your local authorized VP Builder or contact us at 800-238-3246.



www.vp.com
©2009 Varco Pruden Buildings is a
division of BlueScope Buildings North
America. Inc. All rights reserved.