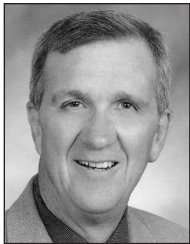


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Technology: A looming liability crisis on construction projects

BY RICHARD ALEXANDER



The use of digital technology is burgeoning on construction projects, including CAD drawings, project websites, interactive delivery processes such as online submittal review and online estimating, object-oriented, interoperable design, and the use of computer models.

This trend raises three major, distinct liability issues. They include (1) the large scale use of electronic files and the risk of misuse, (2) the impact of software licensors limitations of liability, and (3) the failure of the industry to address these issues in contracts.

First, technology allows parties on construction projects to instantly transmit plans, specifications, and other project documents electronically. However, electronic documents are no substitute for the permanent hard-copy contract documents. Electronic documents can be revised by third parties without the knowledge or consent of the preparer and, when plotted, can result in unintended design and corrupted files.

Nevertheless, electronic documents are commonly used for project coordination, submittal review, tenant improvement work, and a vast array of other purposes. The risks of using such electronic documents are sometimes addressed in electronic-media agreements. However, for most electronically transmitted project docu-

ments, there are simply no contract provisions addressing potential liability for unauthorized changes, corruption, or misuse of electronic documents.

Second, it is fundamental to contracting that parties make an effort to allocate risk according to fault. However, liability for technology-related issues may be disproportionate to fault.

Although few courts have addressed these unique issues, one case provides a glimpse of what can occur when the world of technology collides with that of construction: *M.A. Mortenson Co. v. Timberline Software Corp.*, 140 Wash 2d 568, 998 P2d 305 (2000). In *Mortenson*, a contractor installed a new computer network operating system that required a new version of its bidding software.

The contractor used the new bidding program to bid on a project, was the low bidder and, after it was awarded the contract, discovered that its bid was approximately \$1.95 million lower than it had intended. The contractor sued the software provider for breach of express and implied warranties. Based upon the limitation of liability (“LOL”) clause in the software license, the trial court granted the software provider’s motion for summary judgment. The contractor appealed to the Washington Supreme Court. In upholding the decision in favor of the software provider, the court held that the LOL provision was enforceable.

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This single case has much broader significance than just settling a dispute involving an estimating error. It demonstrates the risks of using computer technology in construction. Although it may be possible to negotiate manuscripted contracts, for software the type of LOL clause used in Mortenson is typical. As a result, if software mistakes or defects cause problems in connection with CAD drawings, project websites, online submittal review, object-oriented design, or other aspects of a project, software suppliers may bear little or no legal responsibility. In that case, unwary software licensees and others involved in construction projects may be held responsible.

Finally, despite the significantly increased risks relating to technology, the use of technology is not being addressed in most agreements on construction projects, including standard-form agreements. As one commentator recently noted:

“The construction process is undergoing profound change. The participants are taking on new and different roles and will undoubtedly be accepting new responsibilities. But the legal issues related to these changes are largely being ignored. There are no efforts, for example, to prepare contract documents that reflect the parties’ responsibilities in a collaborative, electronic based environment. There are no efforts to amend professional registration requirements to accommodate the design participation of vendors and object designers. Few construction documents discuss the responsibilities for coordinating and maintaining Web based documentation and none adjust the parties’ risk allocation to reflect these new realities.”

Howard Ashcroft, “Vendors in an Internet World: Design with a Little ‘I’” (2001) (unpublished).

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With limited exceptions, agreements on construction projects do not address what is occurring in the real world, technology-wise. See “Technology and Construction, Stein, Alexander and Noble, Part I, AIA General Conditions in the Digital Age: Does the Square ‘New Technology’ Peg Fit into the Round A201 Hole,” 25 Construction Law Reporter, 25 cc, 367, pages 3-20 (Dec. 14, 2001). There simply is no contractual allocation of the risks that arise from the use of technology on projects. For example, the only reference in the AIA B141 to technology is Article 1.3.2.4, which merely provides for a separate agreement for electronically transferred documents. Clearly, the fundamental purpose of contracts is not being fulfilled as it relates to technology use on construction projects.

In sum, new and significant risks are arising from the use of technology on construction projects. To date, the industry has failed to adequately address these risks in contracts. That failure creates the further risk that technology-related problems will be resolved with no regard to which party is actually at fault. These issues must be addressed in the future, or the delicate balance of responsibility of the parties on construction projects may forever be altered.

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