risk management topics for structural engineers

Total Recall

Written Communication, Documentation and Retention By Terrence M. Lindsay, P.E., S.E., SECB, Eric L. Singer, and Karen Erger

Storing and retaining paper documents used to be easier. Project files were easily divided up in boxes with labels, project numbers and dates. As long as they were kept long enough to deal with tax audits or claims, all was right with the world. Electronic data changed everything, particularly as we moved to an email and attachment practice. How to organize and retain electronic documents is too frequently left to the uncertainties of hard drive longevity and email programs. Having a written document and data retention policy is crucial for all paper and electronic files in your practice.

Document retention is governed by a number of authorities, laws and regulations, as well as philosophies about defense of claims and the practical realities of available and affordable storage space. There are tax rules, litigation rules, statutes of limitation, criminal laws and, ultimately, common sense weighed against the cost of storing work product of an engineering practice that adds new projects, paper and electronic data every year. In addition, the rules governing litigation in Federal courts now impose severe penalties for even inadvertent destruction of data in pending claims. Do we really have to save *everything*?

A Matter of Trust

Claims can be made for a very long time after completion of a project, making memories an unreliable source of facts. In addition, recollection of events are colored, magnified or erased by one's perceived importance at the time. Engineers remember issues differently than architects and contractors. Recollections also fade with time, particularly when employees move on to new phases in their careers. For all of these reasons, documentation created at the time of an event is much more likely to be accurate and more persuasive evidence to a judge or juror.

Consider a site visit during which nothing particularly noteworthy was observed, but later that day a steel worker is injured. Four years later you are in a deposition and asked what you remember about that particular day. Without any written report, you will be at the mercy of whomever is questioning you and what other witnesses remember about your presence there. With a written observation report from that day, you could confirm without doubt that steel erection appeared to be proceeding, was approximately 50% complete, that the steel erector had 10 workers on site and, maybe most important for liability, that you were on site for less than one hour and gone before the accident.

Proof that you acted within the standard of care comes from evidence of what you did and when. If you specify a new product and only have read the product literature in a magazine, or never set foot on site, you will have a difficult time proving that you did what others would have done in the same circumstances. On the other hand, keeping file materials or electronic data to reflect what you did and when – dated printouts of calculations, plots and photographs, or physical records of your visit to the manufacturing facility – you can easily demonstrate the genesis of your work and the homework you did to get there.

Documents serve two purposes. First, they may jog your memory to help place the time of the accident in context. Second, the documents, printouts or pieces of paper are inherently more trustworthy than any witness' recollection. Showing a piece of paper or an email to a jury makes your facts reliable and your testimony credible.

I Heard It Through the Grape Vine

An engineer's primary goal is to avoid disputes altogether. Documenting client or design team decisions is frequently seen as covering one's rear end. Documentation, though, serves the more important purpose of clarity and avoidance of confusion. By sending a memo, you may clear up an issue on which there is some confusion and generate action to clear it up. The memo serves two important purposes: It prevented the problem and it documented the decision process for use later, if necessary.

Mr. Postman: Email Policies, Written and Otherwise

Interpersonal communication is not perfect. Despite clear thought, one might still be imprecise. Design professionals, clients and contractors used to speak to each other in person or on the telephone, where one's voice, facial expression, volume, inflection, tact, politeness and other attributes could be interpreted and contribute to understanding. Email, texts and "tweets" remove a number of features of interpersonal communication and can leave intent unclear - jokes do not always appear humorous when printed in email. With the sheer volume of electronic mail, documents and data increasing with every project, the opportunity for miscommunications increase every day.

Sticks and Stones

Email is typically written less formally than letters and memoranda. It can be sent quickly from a PDA without the safeguards one might employ with a more formal letter, like carefully reading a draft or calming down before hitting 'send.' All documents and email are fair game in litigation and you can expect any embarrassing or threatening email to be blown out of proportion for a jury. Every business should have a written policy about email use, starting with appropriate contents.

Some companies insist that any communications be sent on letterhead and not by email. Others communicate almost exclusively by electronic mail. At either extreme or something in the middle, consider the types of communications that should not be sent in a company email – jokes, insults, personal information, confidential information or other material that could easily be forwarded, cut and pasted or otherwise disseminated in a manner other than as originally intended. Then assemble a policy to be part of your other written employment policies (sick days, vacation, moonlighting – you do have written policies, don't you?).

NOTE: This article is intended for general discussion of the subject, and should not be mistaken for legal advice. Readers are cautioned to consult appropriate advisors for advice applicable to their individual circumstances.

Hooked on a Feeling

It is relatively easy to attach the wrong document to an email, particularly if done quickly and without opening the attachment before sending it. The recipient may receive it, file it and not open it until much later, or never realize that it is the wrong document. Previous CAD backgrounds can be difficult to distinguish, particularly if they are sent and not opened right away by the sender or the recipient. This arises even more frequently with projects that have been delayed for some period of time. It may be safest to print everything that you send and receive. Reality of volume, however, suggests that very few of us can do so. If you are not going to print what you send or receive, at least open it to make certain that it is what you think it is.

Disorder in the House

Some firms leave email organization to individuals while others rigidly enforce projectby-project electronic filing. Email volume can be overwhelming while a project is proceeding. In the short term, it is very important to be able to sort email by date, project, sender and recipient and to have a procedure in place to do so. Also consider what would happen if any one computer were stolen, lost or damaged during the project. If you use software that overwrites the backups on computers or you decommission computers as employees leave the company, you may be destroying data that should have been preserved for pending claims. If a claim is brewing, err on the side of caution and preserve everything. Overall, you should have a written policy and stick to it.

Paper or Plastic?

Retention of paper documents allows you to access drawings or data even if your computer crashes. Consider what paper records to keep and for how long. Some firms save only electronic data, which is only as good as the electronic medium on which it is stored. If you stored your music on 8-Track Tapes, would you still be able to listen to it? The same is already true of floppy disks and will eventually be true of CD-Roms. Whenever possible, keep electronic backups on trustworthy media but also keep some basic documents on paper - your contract, your final drawings and specifications and any documents that could be useful in the future dispute are good candidates for the paper trail.

Keep in mind that claims can roll in for a long time after completion of your work. If you are using archival software, be careful about how and where you store the backups. Many companies keep their archived backups right next to their computers. If the building burns, floods or is robbed, the archives will be gone along with the computers. Take the archives home or to a safety deposit box at the bank every week.

Backup drives and software have become so inexpensive that even the smallest offices have access to backup methods. Whatever the size of your office, your office information technology is a valuable asset both for continuing work and for protection from claims. Map out a strategy for managing the increasing volume of electronic data, paper records and other materials and document your practice with a written policy.• Terrence M. Lindsay, P.E., S.E., SECB is a structural engineer and President of Lindsay & Associates, Inc. in Aurora, Illinois. He may be reached at **t.lindsay@lindsay-se.com**.

Eric Singer is Senior Counsel of Ice Miller LLP in Lisle, Illinois. Eric concentrates his practice in representation of design and construction professionals. He may be reached at **Eric.Singer@icemiller.com**.

Karen Erger is an attorney and Account Executive with Holmes Murphy & Associates, Inc. in Cedar Rapids, Iowa. She may be reached at **KErger@holmesmurphy.com**.

