

AN OPINION ON THE FAIR USE OF DIGITAL FILES

By John H. Gutri, O.L.S., O.L.I.P.

It's been evident for some years now, at least to me, that the world is becoming more and more virtual. While the perception of a paperless society has been effectively shattered by the onslaught of highly efficient printing devices, there is nevertheless, an increasing movement towards the demand for digital files to be among the project deliverables. What's more, a digital CAD drawing is often requested months or years afterward, sometimes by a third party not involved in the original transaction. As a profession, we seem to be supplying these without much regard for the implications of such action.

CAD files, spreadsheets, computation files and so forth are all work products. They are no one's business but our own. They are simply the modern tools we use to do our thinking in the process of rendering a professional opinion, just another version of the head scratching and doodling necessary in order to come up with our conclusions. Those conclusions are summarized in a report, which we sign, seal and distribute as limited copies for their intended and limited fair use.

It takes about two seconds to make a million copies of a digital file and another two to send them to a million people. Is this

starting to sound disturbing to anyone besides me? Just try and wrestle a lawyer's work product from his office and see how much success you have. Now ask him for his digital files. Can you already hear the expletives?

All right, but we live in the real world, you say. And in the real world, people know we use CAD, people push to get what they want, and more often than not, we, as surveyors accommodate them ... because unlike most lawyers, surveyors are generally spineless and I guess as a group, we don't really understand our function. Otherwise, we simply wouldn't do anything so stupid without laying some careful groundwork.

In our industry, there's no compensation when a subsequent property owner calls and capitalizes our time with a lot of leading questions about a survey we prepared ten years ago. You know darn well the survey is out of date because it only shows a building foundation under construction and you suspect, with good reason, these people probably aren't squatting in a concrete box that has no ceiling. At least with a paper print you can point to the date. You can point to the copyright and the intended user(s) of the document in order to curtail discussions of third party responsibility and liability. After all,

you only got paid (hopefully) at the time you delivered the job. But now the next generation of property owners, or maybe even their neighbours, have some questions. And of course, they're not really asking questions at all. What they're really trying to do is obtain your professional opinion without paying for it. If the conversation becomes too exasperating, you can at least ask why they happen to be in possession of an illegal copy of a survey, which in and of itself, violates copyright. But what does it mean when they start asking questions about one of your CAD drawings?

Speaking of old surveys, I recently received an email from a couple with an interesting rationale for a free copy of an old survey. They initially only wanted to pay for a mark out and when the mark out was completed, they figured they had a pretty clever argument.

Thank-you for the clarification. One thing I am wondering - given you have the original survey that was done on our house, and now that the posts have been verified am I correct in assuming there has been no change in our property line since the initial survey? If that is the case could we please get a photocopy of that original survey you have on file? I would like a hard copy of something for the recent work done. My understanding was that your policy was not to issue a copy of a prior survey until you were able to verify that there had been no changes since the last one. We do not require a brand new survey - just the copy of the original. I realize that once the pool and fence goes in that if we

wanted those included that would require a new survey. At this point I do not think that is necessary but I would like a copy of the original.

I love that – *we do not require a brand new survey, just the copy of the original because you were able to verify everything.*

They didn't get a copy.

You know, it's funny. Our association has spent good money obtaining a legal opinion regarding the release of old survey documents to the public with a resulting conclusion that we're playing with fire to do so. So, what do some of us do? They promptly make it extremely cheap and easy for the public to obtain such documents over the Internet. Some firms have actually created a business model based on this service. All the while, these firms collect a fee from the public while the rest of us collect ridicule. One day, in a landmark case, we'll find out just what a judge thinks of the disclaimers everyone's been using. I'd like to see that tap dance around the public interest issue and how it was protected by releasing out-of-date information upon which a lay person relied because they are deemed not to know any better. The judge will then explain to us that we, as the professionals, should know better, despite all our disclaimers. Don't think so? When a bar owner is assessed guilt for serving liquor to an automobile operator who commits vehicular homicide on his way home – well, you do the math.

Maybe the landmark case won't even be a suit for damages.

Maybe it'll be a Privacy Act issue. A survey is, after all, a contract between a private person and the professional. Just imagine if your doctor posted the results of your last physical for sale on the Internet. There are probably plenty of organisations that would find it useful to purchase such a thing, not the least among them, the myriad purveyors of Viagra. Man, you think you're getting a lot of spam now ...

The problem with any such landmark case is this; if you go down, I go down with you. My insurance premiums go up ... my reputation becomes tarred with the same brush ... there is no upside for anyone.

Now, I realize that I'm philosophically at one polar extreme of this argument, in opposition to some of my professional brethren. There are plenty of colleagues who shrug their shoulders and say 'what's the big deal with selling old surveys?' Here's the big deal. What if a company made a business of selling ten year old financial reports to market analysts? Probably no one would buy them because they know what an out-of-date financial report signifies - nothing. But consumers do not know what the implications of an out-of-date survey are. They just know that for whatever reason, they need a survey but resent paying for it because they don't understand what it is. The firms that provide a cheap solution by supplying old plans are taking advantage of that market ignorance. This is predatory corporate behaviour. Shame, shame, double shame.

What's more, this represents a blatant refusal to accept any fiduciary responsibility for maintaining the cadastral fabric, which built this economy in the first place. Shame again. So much for our role as professionals and officers of the court. I guess we're just blue collar contractors after all, sleazing ourselves to the lowest common denominator.

Here's another big deal. One doesn't have to look too far into the future to a time when a digital file will become *the* deliverable and the paper will be ancillary to the transaction, if requested at all. So, what are we doing today in preparation for this eventuality? Well, we're happily educating our clientele with the view that our digital products are relatively worthless and that they are welcome to do whatever they like with our data. Doesn't bode well for our future. In fact, I'd be surprised if our Errors and Omissions carrier actually continues to underwrite us as a profession at that point. And you know that sooner or later, we'll have that landmark case. A layperson will make some unforeseeable assumption about a set of data that we could never have anticipated in a million years, or go ahead and use that old survey to dig that hole and suffer actual damages as a result. Then somebody will pay because the courts will make sure of it ... if not them, then the Ministry of Labour and their inspectors. And when that happens, we all pay. It's just a matter of time.

You know, this whole scenario of selling old plans reminds of that TV commercial where the doctor is explaining on the telephone how to make an incision and the guy at the other end of the line is sitting in his kitchen staring at a butter knife in his hand - obviously a lot cheaper than using legitimate medical facilities - but just as unwise as downloading an old survey, then standing in your yard scratching your head with your neighbour - albeit not as painful.

You'll notice that the major players within the digital industry, who have become successful and maintained that success over time, Microsoft, Norton, AutoDesk ... those guys ... they've developed principles and policies regarding their digital products. Bet you don't have any of those in your office, do you? Principles and policies, I mean.

Do you know what they do, these captains of the digital industry? Well, first off, you as a consumer never 'own' anything. You have a limited license to use. And, boy it's limited. Read the fine print sometime. What's more, there's usually a subscription fee of some sort. They call it a lot of different things like 'maintenance contract', but we know it's a subscription, or as it was referred to in an earlier time, 'tribute' or 'protection money'. We also know not to bother calling it there's a technical problem and we've opted out of paying that 'protection money'. Another thing they do, these rascals, is completely abrogate any and all liability and responsibility for anything. Again, read the fine print. They have good reason to do so, too. How does one prove or disprove that a digital file has been used in accordance with anything? No, essentially the principle they employ is simple - if you want to use their digital products, you're on your own, pal - no matter what. And, they'll collect a hefty fee for that, thank you very much. But they're not licensed professionals who are held responsible by a system of ethics, case law and legislation. Let's face it; neither we, nor they for that matter, have been taken to task by the judiciary. Do you think that will always be the case? Or do you think that the longer time goes on, the closer we're getting to the inevitable lowering of that boom?

Nevertheless, our firm has always done two things when supplying digital files of any kind. One, we've prepared a statement of use and two, provided a mechanism for its enforcement. Similar to the 'I agree' button, whenever one installs software, we've made it clear that the physical breaking of a seal over a CD or diskette package, or the opening and reading of an attached file in an email is sufficient mechanism to activate the enforcement of our statement. And, just like the 'I agree' button, the choice is simple, if you don't agree, don't use the file.

We've developed several statements, addressing several issues with regard to digital data, and I've presented them below for your review, but I'm pretty sure that at the end of the day, such statements will fare no better than a leaky prophylactic ... you only think you're safe. Insurance adjusters are pretty smart guys and one of these pretty smart guys once told me, 'I don't think you can abrogate your professional responsibilities with disclaimers'. Maybe so, but I'm not fool enough to say absolutely nothing.

So here goes ...

License for Use.

Active CAD drawings and other digital files transmitted to authorized clientele comprise COMPANY X work product and do not form any part of the deliverables unless specifically arranged in advance. Notwithstanding such digital deliverable, no authorization for use of any COMPANY X digital file is given unless specific licensing is granted by COMPANY X on a case by case basis, as requested and approved in writing.

Disclaimer of Warranty

Whereas no practical control or restriction on the purposes, use or alteration of supplied digital data can be exercised by COMPANY X, the attached file(s) is/are supplied as a matter of courtesy and is in no way to be taken as appurtenant to, associated with or in placement of copies of the officially signed and sealed Plan of Survey. The data is provided "as is" without warranty of any kind, either expressed or implied.

Although every care and diligence is taken to ensure the accuracy and correctness of all supplied digital data, any and all liabilities for damage, direct or indirect, however caused and resulting in any way by the use of the supplied digital data, is the full and final responsibility of the user.

Copyright

All rights are reserved. No part of the supplied digital data may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without the prior permission of COMPANY X.

Acceptance of Terms

Acceptance of all the above terms will be deemed to be acknowledged by opening the digital file or breaking the seal on the diskette/CD.

You figure that about covers it? I don't. It reminds me of that saying, you know, door locks only keep out the honest people. Why do we assume we deal with a professionally like-minded clientele of honest folk? In all the early high tech literature, did anyone ever foresee the manifestation of such a thing as a computer virus? Today, the issue of malware comprises about 80% of all technical and computer industry literature. The other 20% is advertising.

I don't know if you've noticed or not, but its like pulling teeth to get cash out of a bank any more. I had to step aside and wait like a guy placing a special order at McDonald's because of the time lock on the teller's cash drawer and all I wanted was a lousy thousand bucks, which is beyond the limit of the cash machine. Back in the day, they asked John Dillinger why he robbed banks and he said, 'because that's where the money is'. Not any more. What's to stop an off-shore company from hacking a website, bulk porting all the files put there for legitimate public purchase, then selling them for only pennies a copy on a competing website? The only thing standing in the way of such a thing is some dubious and quickly outdated data protection software and an underpaid system administrator distracted by video games and Star Trek trivia. Data theft will possibly become the next significant crime. And you thought you had it made in the shade with plans of a secure income stream.

Here's a little chestnut. See if this has ever happened to you. My field crew met with a client on site, who provided them with architectural drawings and suggested that they use these to mark down their measurements while they work. They figured this to be quite thoughtful and accommodating – like, why draw notes if you don't have to, right? He followed them

around all day breathing down their necks because he was in a hurry for the results. At the end of the day, he bullied my guys into collecting 'his property' back which he passed along that evening to an architect. I didn't de-brief the crew because they went directly home from the job site, so this all occurred unbeknownst to me. Early next morning, I got a call from the architect questioning me on field notes I hadn't even seen yet. Needless to say, I tore a strip off him for even being in possession of my work product. Then he and my client both received an education in professional conduct. Our firm now enforces a strict policy regarding the accepting of plans only on the condition that control of those copies is transferred to the firm. We also have a policy about field crews not disclosing any work product to anyone under any circumstances and if someone has a problem with this, they are instructed to call the office for clarification.

Do you think it would be more, or less difficult for a client to abuse your data in a digital environment?

And if all this weren't worry enough, our firm has every magnum load, slide bolt, double action, over and under, 128 bit encryption, double blind firewall known to man installed on our servers. This has allowed us, at the very least, to detect the three times we've been hacked. I'd be willing to bet for most of you, the entire contents of your computers have been downloaded, probably more than once and analyzed for anything worth stealing. Computer running kind of slow – you've probably been commandeered as a spamming slave. It's happily sending out computer junk mail without you, or your operating system knowing about it. You'll find out though, when the RCMP show up at your door one day. What are the chances? Pretty slim. There's so much crime to keep up with, the criminals operate with relative impunity. The real irony, the slave was probably set up by an Expert System Bot – never activated by human hands or even with someone's knowledge! It just wormed its way in on an open port (of which there are about 128,000) and did its thing. Isn't broadband wonderful?

How do I know this stuff? I foolishly took a Computer Crimes Investigation course. I wish I hadn't. It's like taking a course on communicable diseases. You never want to go outside or touch another human being again. By the way, the industry really likes to downplay this stuff. Computer crimes are not a very positive message from a high tech marketing standpoint so salespeople generally avoid this discussion.

Remember the 'Winners' hack? Thousands of personal VISA records compromised? There's a class action suit going on. Probably some federal investigating, too. But, the good hacks go undetected. During my CCI course, I had an opportunity to trade war stories with Sys Admin guys who look after huge server farms. A company fired this one guy, so he activated a trap door he'd set up, created a phantom partition with a phantom operating system, then merrily carried on business with the company's data on the company's computer. That's pretty clever. He made scads more money after getting fired than when he had worked there. They caught him quite by accident. Like so many others, this story was never released to the public though – too embarrassing for the company because

security was part of their marketing claim, so, no criminal charges either. Then there was this other guy ... you know what? I could go on, but I'd just scare myself silly all over again. These high tech guys are some of the smartest guys in the world and some of them are as evil as they come.

The high tech industry often refers to itself as 'The Shark Tank'. As a professional association, are we ready to play with the sharks?

Here's a final thought. Does digital data, which contains 'survey' information, fall under the relevant statutes and case law? Or does it, by its very vapour-like nature not really fall under any regulation because it doesn't really exist. A piece of paper can be viewed by anyone, at anytime. Can you pick up a diskette and see what's on it? I can't. In fact, unless you happen to be in possession of the appropriate 'space cadet decoder ring' (often referred to as hardware and software), you're not going to see anything, ever.

I can generate all sorts of data with my software. You can generate all sorts of data with your software, and maybe our decoder rings can speak to each other, or maybe they can't. A photocopy can be compared to the original by anyone looking at it. How can I guarantee the faithful reproduction of a digital file? What is the legal validity of such information? I don't know of any court case which has addressed this fundamental issue. The judiciary still considers eyewitness testimony as paramount evidence and we all know what a crock it can be. The point is this; we're getting so removed from the real world

into the realm of data manipulation, that sooner or later it will become a legitimate defence to discount such data altogether.

Hardware statistics seem impressive, only one read or write error in a billion. Considering that CPU's operate in the billions of cycles per second, that's a lot of errors in an hour. Don't believe it? Have you ever seen the 'Blue Screen of Death'? How about that mysterious hang-up that even CTRL-ALT-Delete won't clear? Did you ever bring up a digital image where half of it was missing? If there were ever a circumstance suggesting a case for reasonable doubt, this has to be it. In fact, I don't know whether the concept of faithful reproduction has been tested in court at all. Maybe that's the defence all those firms selling old plans are hanging their hat on. Of course, maybe one day the courts will consider digital data as prima facia evidence – like an eyewitness. Stranger things have happened.

Perhaps someone with more legal understanding than I can look at these issues, because sooner or later, the digital file will become *the* deliverable, whether we like it or not. What we do today will define the implications this has for us tomorrow. The digital minefield I see us traversing as a profession is giving me a headache, so I have got to go.

Just as an afterthought ... if your initial urge is to run off and think about regulations which specify the correct forms and certificates, together with digital formats which should be adopted as standards for our digital deliverables, you've missed the point.

