risk management topics for structural engineers

## The Tale of a Construction Accident

How a Tight Scope of Work Can Save You By Frank S. Malits, P.E.

I remember it clearly, even though it was actually over three years ago. I was driving to an early morning meeting, stuck in traffic, when I took a call from one of our senior project managers. She told me that she was at a construction site for one of our projects, and that one of the tower cranes had just collapsed.



My gut reaction, as I think would be true for most people, was "Is anyone hurt?" In this case, the crane operator was injured, but survived. It was absolutely amazing that no one else was seriously hurt or killed, since a large portion of the crane crashed onto a residential development adjacent to the construction site, causing significant damage to several units.

We quickly moved to send one of our principals to the site to provide assistance in any way we could, and also to support our project manager. Our staff stayed on site for essentially the entire first day of recovery, as well as a good part of the second day. We felt that this was the correct thing to do. We returned to the site several days later at the request of the project's developer to assist in evaluating the structural damage to the adjacent residential properties.

By the end of the second day, as the mess was untangled, it became apparent that our firm's work did not play a role in the accident. This knowledge was gained primarily by our being present on site and observing what was happening. This information proved invaluable to us later. But of course, just because of the magnitude of the damages, we began contemplating the various avenues from which a lawsuit could come.

To complicate matters a bit, we had two contractual roles on the project. First and foremost, we were the SER for the project, contracted to an architect. This contract specifically stated that "design or review related to the Contractor's construction equipment, including cranes and hoists" was NOT included in our scope of work. However, we took on a second role when we contractually agreed directly with the concrete subcontractor to design the foundation pads for both tower cranes. This is fairly typical in our area, especially

when foundation conditions are challenging as they were in this case. This second contract was again very specific in that we agreed only to the design of crane foundation pad itself, and specifically excluded the design of any tower crane elements themselves, as well as any inspections of the crane.

After consulting with our attorney, we saw the potential for up to seven separate lawsuits that could result from this event: one on behalf of the crane operator, and numerous subrogation suits arising from insurance companies who insured the adjacent damaged properties.

It did not take very long before the first suit was served upon us. We were one of about eight named defendants. It was a subrogation suit, as anticipated, and we knew that more were inevitably coming. Since we were extremely confident that we were clean in this matter, we decided to go on the offensive. Our attorneys contacted the plaintiff's attorney, and essentially educated them to our role on the project, supported by those very definitive written work scopes and contract language. It took some time, but eventually the plaintiff's attorney agreed to let us out of the suit, but not before the second subrogation suit arrived.

The second subrogation suit was essentially verbatim to the first suit. It was becoming clear how the remainder of the suits were going to be brought, so our attorney again went on the offensive, this time with the added ammunition that the first plaintiff's attorney had already agreed to let us out. We were released from the second suit in much shorter order, which resulted in our not being named in the subsequent subrogation actions.

We never did become involved in the crane operator's suit. One of the primary reasons we were able to avoid that action stemmed from us contracting with the concrete subcontractor directly. Since the crane operator was an employee of the concrete subcontractor, and we were working for the concrete subcon-

tractor, we were protected by the workmen's compensation statutes in the state in which the accident occurred. Again, we had nothing to do with the accident, but the manner in which we contracted for the work effectively protected us and saved us a slew of time and attorney's fees to prove our innocence.

We are currently not involved in any of the ongoing litigation, and have spent only a modest amount in attorney's fees. We have not had any significant discovery costs, and have avoided deposition and trial costs entirely. We consider ourselves extremely lucky.

There are several valuable lessons that we learned from this event that are worth sharing and repeating:

- 1) Don't avoid the site when something goes wrong. Help out if you can. Represent yourself and your firm, and protect your credibility. Be alert to things that can assist your own defense later.
- 2) Support even your most senior staff with principals when something goes wrong.
- 3) Tight, well-written scopes of work that indicate both what you will, and will not do, can be your savior. Don't be shy to include things that are typically "understood" or "standard practice."
- 4) Be aware of the legal implications of who you are contracting with. As in the case of the workmen's compensation bar, it was advantageous for us to contract with the concrete sub, as opposed to the general contractor or others.
- 5) If you are clean, don't be afraid to lobby aggressively on your own behalf.

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