Managing Subsurface Risk

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You get what you pay for.

The “Leaning Tower of Pisa” is an internationally known tourist attraction…principally because it leans. And millions of dollars have been spent to keep it leaning (as opposed to vertical or – ouch – horizontal), because the lean makes the tower unique.

Imagine what the outcome would be were a more contemporary structure to begin leaning during construction, the way the tower did. How many attorneys do you suppose would be willing to help the “Leaning Tower of Trump” achieve true vertical? But Trump's towers don't lean because, we presume, “the Donald” is wise enough to know not to skimp on geoprofessional services.

Not everyone is wise, of course. Some still believe there is such a thing as free lunch, possibly because they assume they’re bullet-proof, because professionals they retain for brownfield or greenfield development have professional liability insurance (PLI) coverage that will respond to their claims. But usually that’s not the case, although not for obvious reasons.

PLI is available solely on a claims-made basis; the coverage that applies is the coverage in place at the time a claim is made, not the coverage that was in place at the time the alleged error was committed. The typical claim arises two or more years after geoservices are complete, meaning that the policy in place at the time the claim is made will not be the one in place at the time the contract is signed or services are performed. True: It may be a renewal of that policy. Also, true: The PLI market is highly dynamic, especially in recent years.

As such, the geoprofessionals you rely on today may not have any coverage two years from now. And assuming they do, their policy may have a prior acts limitation that could get in the way (e.g., “We won’t cover any claim made today if the act giving raise to that claim occurred more than three years ago”). Or perhaps the policy’s limit of liability will have been reached, meaning there’s a large claim in line ahead of yours. Or it may be that your type of claim isn’t covered. Or, if it is, the geoprofessional’s PLI carrier might say, as most do, “We’ll fight this.” And the developer is often caught up in that fray.

Put simply, PLI is a tool to help manage your risk. It’s a fragile tool, however, and one fraught with uncertainty. So, while you would be wise to require your geoprofessionals to be insured, that’s hardly a be-all and end-all.

Do you really want to manage your risk? Then use qualifications-based selection (QBS) to choose geoprofessional engineers and geoenvironmental consultants on your own or in conjunction with your architect or structural or civil engineer. Do not delegate the task.

Start the QBS process by asking peers and other design consultants about the firms they’ve used for similar projects. Contact those firms to provide details about your project. Ask the firms to submit statements of qualifications, including case histories of similar projects performed by people who would be involved in your project.

Review the materials you receive. Identify those three or four firms that seem to have the most experience. Contact representatives of the named clients to learn about their experiences.
Were the other design professionals they retained satisfied? What about the lenders, insurers, government agencies, and contractors involved? Were deliverables delivered on time and on budget? Did the cost to remediate and/or construct come in as expected?

Based on what you learn, you should be able to rank-order the firms. Contact the one firm that seems most qualified. Call for a meeting that will be attended by the project manager most likely to be assigned and the individual’s likely back-up. Use the meeting to describe what you have in mind, then respond to the questions that the project managers should ask to shape their scopes. Remember, when you are addressing matters related to your site’s subsurface, you are addressing high-risk issues, because what’s involved is hidden by earth, rock, and time. What are your risk-management preferences? That’s a question that many of the geoprofessionals’ questions will focus on. Based on the answers you give, they will fashion a proposed scope of service. They will price the scope in terms of fees and expenses, and then you will meet again.

Is the cost of implementing the scope more than you want to spend? Of course it is! But it’s not about what you want. It’s about what you need to manage your risk.

“What can we do to lower the cost” is a legitimate question, and you should listen carefully to the answers. The project managers should be able to identify each of the various cut-backs possible and, more important, what cutting back will do to your risk. And it is your risk; one which – given the unknowns involved – exists even under the best of circumstances. As the scope is diluted, risk increases, and the general terms and conditions that form the contract will make it crystal-clear that you bear that risk.

Should you rely on geoprofessionals who are less astute about risk? Who will be willing to accept whatever scope and conditions you insist upon? Put it this way: Professionals who don’t know or care about their own risks surely are not going to know or care about yours. You want professionals who understand risk, because they’re the best risk management you can have.

Why not select geoprofessionals on the basis of bids? Because each bid represents the bidder’s assumptions about what you want and need, based on nothing more than an uninformed guess. And each bidder will assume you want the cheapest possible service they and you can live with, because that’s what it takes to have the lowest bid. (Cheap engineering often results in additional expense, thanks to conservative design.)

But what happens if you use QBS and the firm you consider most qualified seems to be charging too much? Get a second opinion about fees and expenses before turning down the firm that’s most qualified; i.e., the firm that knows far more about what it’s talking about than any other project participant, including the architect, structural engineer, or civil engineer. Should you compromise quality to maintain your budget or should you compromise your budget to maintain quality? If you’re experienced, you know that compromising quality will sooner or later result in a compromised budget. Which is why the top-ranked firm usually gets the assignment. But if the firm decides it’s not willing to budge, close your discussions with it and move on to the firm you consider next-most qualified. But be careful: Subsurface issues still seem to generate more PLI claims than any others. How much better it is to have no problems and no claims in that department. And how easy it is to achieve that outcome when you realize that a really satisfying lunch tends to cost more than one that is likely to cause heartburn.

In geotechnical engineering and geoenvironmental services as in just about all others, the
higher the quality, the lower the risk; the lower the risk, the lower the cost. By investing in quality, you invest in savings. **SLDT**