

My Two Bits

Drilling contractors have a problem: They all too often are basing their bids on geotechnical engineering reports that lack the range and/or depth of information they prefer and/or need. The scopes which the reports reflect are inadequate because:

- A:** the owner's representatives don't know any better and their geotechnical engineers are either equally ill-informed or actually do know better but don't want to disagree with a client representative, or
- B:** the owner's representatives do know better but really don't care, because they seem to be getting plenty of bids from reputable drilling contractors, and their geotechnical engineers are either ill-informed or actually do know better but don't want to disagree with a client representative, or
- C:** something else akin to the above, including the possibility that the report is wholly adequate insofar as the needs of the owner and the owner's design professionals are concerned.

As I see it, this is not nearly as troubling a problem for the subsurface industry in general as it is for drilling contractors in particular. And the law doesn't seem to think it's a problem at all. Innumerable rulings, especially by the federal board of contract appeals, indicate that, as long as they have the time to do so, drilling contractors should conduct their own prebid, subsurface explorations. As such, when drilling contractors rely on an alternative (e.g., the geotechnical engineering report prepared for the owner and its design professionals, but *not* the drilling contractor) is something they do at their own peril.

I understand that, practically speaking, and as a matter of industry custom, drilling contractors do not have the time or budget to commission their own subsurface explorations and reports. As such, they consciously decide to gain the benefit of saving time and money by accepting the risk-cost of relying on something prepared exclusively for others, with the extent of that risk-cost being inversely proportional to the extent and quality of the geotechnical engineering services commissioned by the owner.

Even though the ramifications of drilling contractors’ limitations, customs, and preferences are borne principally by drilling contractors, organizations like ASFE/The Best People on Earth should be concerned, because, when project problems arise, all project participants are frequently sucked into the ensuing disputatious maelstrom; i.e., “We’re all in this together” rings true. What could organizations like ASFE do? Probably assist in the development of some general guidance directed at those owner representatives and geotechnical engineers who need it; i.e., those who, when it comes to matters such as this, are evidently about as dumb as a bag of rocks. (I trust most would concur that guidance on how to achieve quality is of little value to those who know how to achieve quality and do, and those who know how to achieve quality but have no desire to.)

Note that evolving legal issues mandate that the guidance *must* be general. If a credible organization that includes geotechnical engineers among its members develops specific guidance on what should or should not be included in a geotechnical engineering scope and/or report for the benefit of drilling contractors, plaintiff’s attorneys would cite that guidance in order to allege that, according to the geotechnical engineering *profession*, geotechnical engineers retained by an owner also serve drilling contractors. Accordingly, the attorneys would allege, geotechnical engineers owe a duty of care *both* to their owner-client and to drilling contractors. That would give drilling contractors a *right* to rely on the geotechnical engineering report, even though the owner-client insisted (as some now do) on a scope of service that inherently declared, “Drilling contractors be damned.” That situation would expose geotechnical engineers to litigious quicksand, something which they and others (such as drilling contractors) need to understand. In the growing number of states where the economic loss doctrine (ELD) is not upheld, a contractor could allege it had a right to rely on the geotechnical engineering report, then did so, and as a result bid too low. As a consequence, that contractor could win a potentially huge negligent-misrepresentation (vs. professional-negligence) claim against the geotechnical engineer, provided that the trier of fact (a judge or jury) agreed that:

- 1) the contractor actually did have a right to rely on the report;

- 2) the geotechnical engineer knew the contractor would rely on the report;
- 3) the contractor relied on the report; and
- 4) the contractor's loss was caused by the geotechnical engineer's misrepresentation of conditions, even though:
 - those conditions were hidden by earth, rock, and time,
 - the geotechnical engineer had to implement the scope preferred by its client, and
 - the geotechnical engineer was not negligent.

But let's say, purely for the sake of discussion, that an industry association plowed ahead nonetheless and developed not highly generalized guidance, but rather a nuts-and-bolts model scope of service and model report that would include just the kinds of data needed by drilling contractors. Realistically, that guidance would be of value only to naïve owners who are served by incompetent, lazy, or cynically unprofessional (and risk-ignorant) geotechnical engineers. (I wonder how anyone could develop such models in any event, given that a geotechnical exploration should be scoped based on judgment. Scope would differ widely for a 200-unit townhouse development vs. a 30-story office tower proposed for the same site, or for either proposed on alternative sites with widely differing geologic conditions, or for either delivered via DB (design/build) vs. DBL (design-then-build-then-litigate).)

In essence, then, the only real guidance can be general (*translation*: of little real value to those who genuinely need nuts and bolts), but those who take a year or two to develop it could be inclined to say, when they're done, "Problem solved." But it wouldn't be, because – despite the inherent risks of developing such guidance – it would fall mostly on deaf ears.

First, the "good" owners would ignore it. They're the ones who know enough to rely on quality-oriented geotechnical engineers whom they instruct to develop and implement high-quality geotechnical engineering scopes and reports. The "bad" owners would

ignore it, too. They're the ones who have the same knowledge as good owners but prefer to save short-term dollars by relying on geotechnical engineers who think QA/QC is a noise made by a duck, or who know it has more meaning than that but don't care. (These owners sometimes move to the "good" category through unfortunate experience.)

The ones who are left – those who can be converted – have to be the targets, because they're the only people whose attitude/action shift can help ease drilling contractors' bidding problems. But that change will occur only when these folks become educated, and that is not going to happen by developing a model geotechnical engineering scope or report. Based on ASFE's extensive experience with efforts such as limitation of liability and alternative dispute resolution, a comprehensive, multiphase educational effort is required. Those who have the most to gain – drilling contractors – are those who will need to invest the blood, sweat, and tears required to get the job done. Contractor's representatives will need to educate owner's representatives on a one-on-one basis, and contractors' organizations, like ADSC, will have to help. They should consider development of case histories, magazine articles and columns in client- and engineer-oriented periodicals, first-hand testimonials from owner's representatives and engineers who have learned the hard way, speakers bureaus, and even advertising. The consistent message should be, I believe, that owners need to rely on top-quality geotechnical engineers who produce top-quality results, and that the incremental cost of quality saves money both by reducing the contingency allowances that need to be included in bids when data are inadequate, and by lowering risk.

Developing a model geotechnical engineering scope and report, or even a series of such scopes and reports, seems to say (to me and to others), "You can rely on *any* geotechnical engineer who follows the model," and that's just not true. Model geotechnical engineering scopes and reports do not result in good geotechnical engineering any more than the best medical texts result in successful surgeries. You want good geotechnical engineering? Then retain a good geotechnical engineer, and I'd sure love to have organizations other than ASFE making that point.

And here's another point drilling contractors may not be wildly enthused about: The problem has been created by those in their midst who have said, in essence, "We don't care how lousy the geotechnical engineering report is, we'll still submit a bid." That kind of response creates a huge disincentive for quality, and one that all the model geotechnical engineering reports in the world will not overcome. "Why should I invest money in developing a better geotechnical engineering report for drilling contractors when most of the drilling contractors in town are already responding to my RFBs?" an owner's representative may ask. And the question is valid.

The long and short of it: Experience has taught me to believe that, with respect to this problem, a model geotechnical report will have all the impact of spitting in the ocean to cause high tide. We are far from powerless, of course, but there is no magic bullet. As ASFE demonstrated years ago when it sought to gain acceptance of limitation of liability, significant problems can be overcome, but only when those who stand to benefit the most are willing to do the most, with step-one being to stop doing what's causing the problem to begin with. Good geotechnical engineers can help, of course, with step-two being to convince the appropriate owners of that fact. Good geotechnical engineers aren't really in a position to do that: They're too busy working for the good owners.