Squeezing cost savings when selecting engineers, architects, planners or surveyors—even township attorneys—can lead to poor decisions and increased risk, sometimes with expensive and disastrous outcomes. In fact, a lot of the modern-day disasters and public health crises began with efforts to cut costs.

There is an alternate and smarter professional service provider selection process that can save taxpayer money. It’s called Qualifications-Based Selection or simply, QBS.

In the QBS process, professionals still compete. The township determines what is important, such as the type of firm, experience and qualifications, past performance, references, and specific staff assigned. Successful design pros must be good and provide a competitive price to the “buyer.”

Best of all, the QBS process allows the township board to choose the firm it has determined to be best for the project and most qualified by objective criteria that it selected. If you think about it, selecting design professionals by low bid takes this process out of the hands of the officials completely.

Golden Township (Oceana Co.) officials learned firsthand the impact of QBS when it selected an engineering firm to assist them on a USDA Rural Development project for a wastewater treatment plant and collection system improvements project last year.

“Our attorney recommended that we go with QBS,” said Connie Cargill, the township’s treasurer. “And we were all in favor of going that route.

“We’d absolutely use QBS again on a big project like this,” Cargill added. “We aren’t experts in the consulting field and it’s important to get somebody who is highly qualified. While QBS can be used to select any number of professional consultants, this article focuses on the selection of an engineer for township projects.
To save big, think long term

The simple fact is that the services provided by your township’s architect or engineer are the most important factor in determining a project’s overall construction and lifecycle costs. Design fees are typically 0.5 percent to 2 percent of the total lifecycle cost of a project. Yet, these design services determine the other 98 percent of costs.

Because every project has unique characteristics that require careful planning and design, there are choices to be evaluated, whether it’s materials, site options, construction techniques, scheduling limitations, and delivery of what the township expects and needs.

By selecting the most qualified firm and giving the firm adequate hours to provide a complete service, the consultant the township selects will have the experience and time to consider innovations that can provide better designs, and lower maintenance and operations costs.

Unfortunately, seeking low bids for design services often encourages engineering firms to reduce hours and provide minimal scope in order to win the project.

Develop a written policy

Townships should consider developing a written policy for its professional services selection process. Establishing and following a standard process in selecting professional service providers can promote transparency and trust to your constituents. Free QBS resources are available to assist in this process. Michigan’s QBS Coalition has developed a well-defined procedure, complete with sample materials for use by any governmental body. The procedure identifies all required steps, from the first instructions needed to develop a general scope of work and establish a selection schedule to selecting a firm and notifying the unsuccessful candidates.

The QBS Coalition has a facilitator available to explain the process and assist townships in all phases. There is no cost for this service. For more information, call (517) 332-2066 or visit www.qbs-mi.org.

By selecting the most qualified professional service provider and negotiating a complete scope and fair fee to address the specific needs of the project, the board is doing what is best for the township. The township has now hired an engineer that can potentially save on total project costs through a combination of a well-thought-out construction schedules and phasing, scope control, and improved engineering.

Studies have shown QBS is the best process

A 2015 study by consulting giant McKinsey noted that, “All told, efficiency gains in approval, engineering, procurement, and construction can generate savings of as much as 25 percent on new projects, without compromising the quality of outcomes.”

Relying on low price to select professional service providers can drive up your project costs. Pitfalls can include:

1. Change orders

Low-price selection practices encourage firms to minimize the design hours in order to submit the lowest costs, sometimes lower than required to complete the project. This can lead to change orders in design and or construction.

A study on project costs in Maryland and Florida comparing low-bid and qualifications-based procurement concluded that the low-bid process can ultimately be more time-consuming and cost more than qualifications-based procurement (i.e., when considering the final cost, with changes vs. the negotiated price that has a well-defined scope of work).

2. Construction issues/problems

One mistake or omission made during the design phase by a less qualified professional could result in enormous additional costs. Engineering drawings that have minimal details often require much layout and decision-making in the field by the contractor, which adds to the cost of construction and increases the likelihood of error or change orders.

The McKinsey study report from 2015 also noted low price as a contributing factor to cost and time overruns: “Having delivered an unrealistically low project budget, the temptation is to cut corners to maintain cost assumptions and protect the (typically slim) profit margins for the engineering and construction firms that have been contracted to deliver the project. Sometimes costs and timelines are systematically underestimated.”

Perhaps your township hired a professional service provider using low fee and later found that the team didn’t have the necessary budget or experience to secure difficult required permits and now your project is languishing in regulatory purgatory.
Or, the low-fee proposal didn’t have an adequate budget to coordinate the relocation of existing utilities and now construction is delayed and the budget is busted because of unanticipated utility conflicts. A busy street in your business district is closed for an additional month beyond the promised project schedule, causing economic loss for businesses and unhappy residents.

3. High operations and maintenance costs

The best reason to use the QBS process to select your township’s design professionals is to achieve long-term savings. When design professionals are selected based on price, they have to reduce their budgets, which forces them to select systems that are easiest to design, as opposed to evaluating multiple systems and helping select the most economical and cost-effective for the township over the life of the project.

Designs that result in high operations and maintenance costs can quickly exceed the tiny savings of the engineering fees by an order of magnitude. Former Florida Department of Transportation Secretary Kaye Henderson captured it well with his observation, “The best innovations are produced by the best brains and they are not to be bought for the lowest price.” It’s simple—having the “best brains” on your township project can lower the overall cost.

Low-fee design projects carry higher risk for the design firms, too, as noted by Mark Kramer, president of Soils and Materials Engineering, in a blog post:

“Our professional liability carrier and others continually report that design projects selected on a low-fee basis carry a higher risk than other forms of procurement. While there are many variables involved in projects that ‘fail’ and lead to claims, not meeting expectations of the client and poor communication or understanding of the risks are listed as common causes. By their nature, the process of selecting a professional based on low fee when they are designing a unique project is risky.”

Kramer echoes the findings of a two-year study conducted by the University of Colorado and the Georgia Institute of Technology that found that public agencies that use QBS to procure architectural and engineering services are better able to control construction costs and achieve a consistently high degree of project satisfaction than those using other methods. The study found projects using a QBS process had 70 percent fewer cost overruns, shorter schedules and improved construction quality.

QBS rewards teamwork, innovation and proactive problem-solving, and moves away from an adversarial relationship between the township and the consultant. It’s a win-win for the township and its taxpayers.

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