

## QUALIFICATIONS BASED SELECTION (QBS) VS. PRICE SELECTION

Prepared by the Association of Soil and Foundation Engineers, AFSE, January 1984, Edited with permission.

The following dialogue has been devised to identify the various arguments mounted to support **QBS** and point out the invalidity of assumptions of fee-bidding advocates.

Design professionals should become fully familiar with pro-**QBS** arguments, supplemented with incidents drawn from personal experience.

**Q: Why does A-E's advocate noncompetitive selection practices?**

A: They do not such thing. They advocate **QBS**, an approach which causes design professionals to compete on the basis of quality and service. **QBS** encourages design professionals to continually upgrade what they offer. Alternatives to **QBS** in many cases have the opposite effect, because low fee is such an important concern.

**Q: Nonetheless, A-E's do believe it is acceptable to retain a firm without considering its fee.**

A: A-Es do not feel that way. They believe that identifying the most qualified firm and retaining it should be two discrete functions. When **QBS** is applied, selection is based on quality; the retention decision is based almost exclusively on fee.

**Q: What's wrong with considering quality and fee at the same time?**

A: Considering quality and fee at the same time is far easier said than done. First, because of the complexity of submissions, fee -the lowest common denominator -is all too often given disproportionate weight. Even assuming such bias could be eliminated, however, quality is such an important factor it merits separate evaluation. On a typical project, the cost of design comprises one to two percent of construction and life-cycle operating and maintenance costs, but the quality of design determines what these other costs will be. The premium paid for high-quality design can pay for itself hundreds of times over.

Second, fee can be considered only when design professionals develop a workscope on which to base it. Almost invariably, this means elimination of mutual workscope development, one of the most important aspects of any professional design service.

**Q: What is mutual workscope development?**

A: When **QBS** is employed, mutual workscope development occurs after the client has

determined which firm, in his opinion, is most qualified to do the work. The client then meets with representatives of that firm to discuss the project in detail. After gaining insight into exactly what the client has in mind, the design professional explains the different approaches which his firm and staff can employ, and the pros and cons of each. The client then decides which options he wants according to his own preferences. Among other obvious benefits, this approach helps eliminate the unwarranted assumptions and misunderstandings which all too frequently lead to disputes.

In fact, mutual workscope development is the hallmark of all good client-professional relationships. In a physician-patient context, for example, it is known as gaining informed consent. The physician is expected go apply his training and experience to inform the patient of the different courses of treatment available, the potential consequences of each, and which -in his opinion- is best. Most owners and other clients rely on their design professionals to render precisely this type of services, through a **QBS** approach. Once the workscope is established, the design professional is in a position to establish his fee.

**Q: What if the fee is too high?**

A: In that case, the client, with the advice of his design professional, determines which elements of the workscope can be modified. Then he selects reduction options based on his willingness or ability to absorb the additional risks each imposes.

**Q: Suppose they can't come to an agreement?**

A: Then discussions with the firm deemed best qualified are closed, and the firm considered next best qualified is brought in. However, in almost all cases of which we are aware, the firm considered most qualified is retained.

**Q: What if the next-best-qualified firm would have charged less?**

A: The next-best-qualified firm would not be working with the same workscope, so fee-based comparisons are not valid. Besides, the first firm can charge less, too, depending on what the client decides.

**Q: Doesn't issuing a fixed workscope and asking each firm to submit its bid for implementing it get around this situation?**

A: Only in theory. In practice, it creates a great many complex problems. First, it presupposes

that whoever develops the workscope is at least as experienced and knowledgeable as the experts being sought; they seldom are. As a consequence, such worksopes often contain errors, and almost always are incomplete or vague.

Second, because such worksopes are incomplete or vague, those asked to submit fee estimates are forced to make assumptions. If they assume they will be expected to perform work not listed, they must increase their fees. Accordingly, for purposes of securing the engagement, most will assume that the client has another means of obtaining that work, sowing the seeds of misunderstandings, disputes, and change orders.

Third, fixed worksopes usually are based on those prepared for similar projects and/or "standards" which define what is minimally acceptable. As a result, they tend to stifle innovation and creativity, tethering the design professional to what has been done in the past.

Fourth, issuing a fixed workscope assumes there is one best way of getting the work done. In fact, any given firm can approach any given project in innumerable ways. The best qualified firm may be able to suggest an approach which results in considerable construction and/or life-cycle operating and maintenance cost savings, providing it has a chance to explain its approach through the mutual workscope development process.

Fifth, any highly qualified firms refuse to respond to such solicitations.

**Q: Why do they refuse to respond?**

A: There are many reasons. One is based on simple economics. A quality product is more expensive to produce than a cheap product. Accordingly, a quality-oriented firm has very little chance of winning an engagement that will be awarded to a low bidder. Besides that, bid-based solicitations are far more expensive to pursue. In almost all cases those interested have to develop a workscope, and in all cases they have to develop a fee proposal. When **QBS** is employed, these costly steps are taken only after a firm has been notified that it's considered most qualified.

**Q: What if firms are first prequalified or "short-listed," so the competition is open only to qualified firms?**

A: Whenever fee-based solicitations are employed, each interested firm will do its utmost to offer as low a fee as possible. This is done by following or creating a skimpy

workscope which usually omits important quality management operations; assigning lesser-qualified personnel; employing rules of thumb and conservative design, and eliminating time allowances that ordinarily would be proposed for studying alternatives and handling contingencies. All told, these and similar procedures result in cheap design, and cheap design often leads to professional liability problems. For many firms, it's simply not worth the risk to pursue such projects.

**Q: In some cases, though, a project is genuinely routine, for example, when a owner needs a subsurface exploration performed for a 20,000-square-foot warehouse in an established industrial park. It would be standard practice to perform, say, six borings to a certain depth, analyze the samples, and then issue recommendations. Why not ask for bids on a job like that?**

A: Problems often occur on "routine projects" because there is no such thing as a routine project. Thinking there is leads to unwarranted assumptions, and that's how difficulties arise. Consider how the "routine" project just described would be handled through **QBS**.

First, the firm deemed most qualified would review its own files to obtain information about area geology as well as specific sites in the area it already has investigated. Then it would send a knowledgeable representative to the site to perform a visual reconnaissance, to identify surface features and determine if any indicate potential subsurface problems. The representative would also observe surrounding areas to assess their potential impact on development. For example, he may note that a car wash next door discharges water to the soil, suggesting that this situation should be investigated to determine its implications for site preparation or surface drainage system design. In addition, it may occur to the representative that the owner should consider testing to determine whether or not subsurface materials can be used for fill. If they can be, it may be possible to avoid the expense associated with importing suitable fill. If they cannot be used, finding a source of foreign fill, agreeing to a price for it and necessary scheduling all can be accomplished well ahead of time. And the list of concerns goes on, comprising an approach unique to the owner, site, structure and geotechnical engineering firm involved.

One the preliminary work is completed, the geotechnical engineer discusses his concerns with the other design professionals engaged,

and only then does he formulate his technical proposal.

**Q: *And chances are it will involve far more time, and cost far more, than just doing the routine work that would have been specified.***

A: In instances where that would be true, chances also are that following the geotechnical engineer's recommendations will save thousands of dollars in unanticipated expenses and hundreds of hours of grief. In any event, however, the engineer's proposal is just that: A proposal. The client may say, "I want none of it." But even if he does, he at least will be cognizant of the risks he is assuming as a result. And if he does insist on a barebones approach to a complex problem, it gives the firm an opportunity to bow out and save itself from future problems.

**Q: *Why should a firm bow out? It's insured, isn't it?***

A: That's hardly a comforting thought either for the firm or for the client. From a firm's point of view, a particular type of problem may not be insurable or –more commonly– the dollars involved will likely fall within the deductible. However, even if insurance provides full coverage, it cannot compensate a firm for the time lost to dispute resolution, or for the aggravation, lost productivity, and many other problems involved.

Nor is insurance that valuable for the client. He, too, will go through a long period of uncertainty, aggravation, anger and loss of productivity. And finally, when all is said and done, most of the money which changes hands will go into the pockets of the attorneys and others who are paid to resolve conflicts.

For all parties concerned, taking prudent steps to avoid liability problems is infinitely superior to proceeding with a "what-the-heck-we're-insured" attitude.

**Q: *Certainly not all fee-bid projects create liability problems.***

A: That's true, but it is equally true that fee-bidding encourages cheap design and cheap design is far more likely to result in problems. From the design professional's point of view, the simplest defense against these problems is conservative design, that is, reliance on rules of thumb which err on the side of safety. In the case of geotechnical engineering, for example, the customary goal is identifying the least expensive foundation capable of supporting the structure itself. If the subsurface exploration is restricted, the geotechnical engineer is forced

to work with skimpy data. Accordingly, he will recommend a foundation capable of withstanding the most severe conditions likely to exist, even though they weren't found. To recommend anything less would impose a potentially disastrous risk both on himself and his client. Other design professionals take much the same tack. Mechanical engineers will specify oversized heating and cooling systems; structural engineers will oversize columns, and so on. And in virtually all cases, the premium paid to implement a conservative design is many times greater than the "fee savings" which make conservative design expedient to begin with.

**Q: *Are you saying the QBS prevents cheap design?***

A: No, QBS is the owner's best defense against cheap design, but it is hardly a fail-safe preventive. Cheap design most usually is the product of inadequate fees. Inadequate fees are most likely to result when fee-bidding is employed.

**Q: *Can't be said that some firms will propose an inadequate fee when QBS is used, just to get their foot in the door?***

A: Yes, this sometimes occurs. In most instances, however, the firms involved will still turn out good work, because they know that the quality of their performance will determine whether or not they get the next job.

**Q: *Despite all the problems with fee-bidding, some firms with excellent reputations still seek it.***

A: This is true, but no firm we know proposes its best quality when it knows that the cost involved will make its fee proposal noncompetitive.

**Q: *Of course, some firms can turn out high-quality work for less money than others.***

A: A firm which knows that its chances of obtaining an assignment are inversely proportional to the size of its fee is not going to propose doing its best work, no matter what its costs may be. It almost always will propose doing the work in the cheapest acceptable manner.

**Q: *This presupposes that the award will be going to the low bidder. It doesn't have to be that way.***

A: When both fee and quality are going to be considered, a design professional may propose more than a barebones approach, but he would be foolish to recommend all the options that should be considered. In essence, he has to guess what the client is looking for, and even the best guess is likely to result in a workscope

far less satisfactory than the one that would have been developed mutually through **QBS**. It should also be recognized that the client's assessment of a firm's technical proposal will often be based on written words rather than face-to-face discussions. For this reason many firms employ individuals whose only job is writing technical proposals. In some cases what they imply and what they actually propose may be far different, particularly when the client's reviewers are not as technically astute as the submitting firm's proposal writers.

**Q: *What if a client goes to the trouble of preparing a biddable workscope that is precise in every detail, and includes all the necessary quality management functions?***

A: Such a meticulously detailed workscope would have to be prepared by a design professional, but assumedly not the one ultimately selected to implement it. As a result, an approach not of the selected design professional's making would be imposed upon him.

We also must ask, "Where would the workscope come from?" If the client has sufficient expertise on staff to develop one, why does he need an outside A-E? And if he does not have that expertise on staff, how will it be selected and retained?

**Q: *What about the approach, where firms first are prequalified and those on the short-list then submit technical proposals and fee proposals in separate envelopes?***

A: The problems associated with simultaneous review of quality factors and fee still exist. Most of the awards go to the lowest bidder or the next lowest bidder.

**Q: *But only if their technical proposals have been highly ranked.***

A: This is true. Of course, it also is true that some clients require A-Es to include man-hour estimates in their technical proposals. It takes little imagination to determine magnitude of fee based on man-hour estimates, thus injecting bias into the technical review. In any case, the obvious way to avoid having to make a sometimes difficult, subjective decision of ranking qualifications will lead clients to score the technical proposals so close that the fee becomes the "only" decision factor.

**Q: *How about an approach where technical and price proposals are used principally as indicators, so the client uses submissions to rank the firms, and then opens discussions with the one he deems most qualified based on a combination of fee and proposal?***

A: This takes us to the game room. If a firm is smart, it will quickly learn how to devise submissions which elevate its ranking, knowing full well that what it submits will probably bear precious little resemblance to the workscope and fee which ultimately emerge.

**Q: *That doesn't sound professional.***

A: "Professional" means several things. A learned professional, such as an architect, engineer, physician, attorney, etc., is supposed to implement his services in a certain way, and has a great deal of responsibility in doing so. Because what he does often is so highly technical in nature, it is not subject to client oversight. The client has no alternative but to trust that the professional's work is being preformed properly. For this reason members of the learned professions are licensed by the state, to help assure that they have the necessary knowledge and experience to perform properly, and that they maintain a certain standard in practice.

Learned professionals also are expected to operate within a given concept that become know as "professionalism." Because what they do often is technically complex, they should explain options to the client or patient in a candid, objective, understandable manner, without seeking unjust enrichment. In truth, however, many people from many walks of life operate in a professional manner, principally by giving good unbiased advice to those who rely on them. In this respect, then, an automobile mechanic can be every bit as professional as a good physician.

When mutual workscope development is eliminated, professionalism in its generic sense is eliminated, because there is no opportunity to provide it. An architect or engineer in private practice is both a business person and a professional. Naturally, he will always adhere to professional standards in implementing a professional act. However, if professionalism is eliminated from one of his functions, i.e., helping to establish the workscope, all that's left is a business concern, and the design professional will respond in kind. Thus, while taking a purely business approach eliminates professionalism, it is the client who is forcing this development, not the professional. If a client wants a professional relationship, be it with a learned professional or anyone else offering a service, he has to initiate that relationship in a professional context.

**Q: *Then what can be done about keeping A-E costs under control?***

A: There is no indication from any source that A-E fees have increased at a rate which exceeds inflation. To concentrate on A-E fees is to obscure the real issue.

Construction comprises the largest industry in the U.S., estimated by The Business Roundtable Construction Industry Cost Effectiveness Task Force at \$300 billion per year. Since 1972, the U.S. Department of Commerce reports, productivity in the construction industry has been falling at the average rate of 2% per year. In fact, the construction industry has the worst productivity record of any major U.S. industry. Combine this low productivity with the impact of inflation and you can understand why construction costs have gotten so out of hand in recent years.

**Q: *Certainly bidding for design professional services has not caused the problem.***

A: Many situations have caused the problem. Obviously, however, when conservative design is employed, or when plans and specifications have not been subject to quality control, or when field monitoring is reduced or eliminated altogether, problems leading to unnecessary expense result. In fact, design professionals are in a position to contribute mightily to improved productivity on any given construction project, but this contribution will not likely be made when anything other than a **QBS** approach is employed. It is somewhat ironic to note that, at the same time that some owners are resorting to fee-bidding to select their A-Es, many others are forgoing bidding even in selecting contractors. For example, Building Design and Construction magazine conducted a survey of major owners in late 1981, asking them to identify the different contracting methods they would be employing for projects they had planned.

As can be seen, negotiation was the preferred method in five of ten broadly defined categories, and the second-most preferable method in three others. Results of the Building Design and Construction survey seemingly have been verified by a survey conducted by the F.W. Dodge Division of McGraw-Hill Information Services. It found that more than 62% of some 50,000 projects it analyzed in 1981 were negotiated; less than 38% were competitively bid.

**Q: *Why is bidding for contractors losing popularity?***

A: Because it is a meaningless procedure. All too many contractors are encouraged to submit low-ball bids knowing full well that they will have opportunity to submit change orders later on, to

assure a reasonable overall profit. As a result, the bid price seldom is the actual price paid. In addition, owners are finding that a nonbidding approach to selection and retention promotes a professional relationship, whether or not the person performing the service is a "learned professional." When a contractor is retained by a negotiated method, he can be brought into the design process and offer suggestions about plans and specifications while they are being developed. He can also be involved in plan and specification review, to help assure that most errors, omissions, inconsistencies and so on are corrected before plans and specifications are implemented. He has no incentive to do any of this when bidding is used. In fact, bidding encourages the opposite behavior.

In short, anyone who wants to enjoy a more professional relationship with someone offering a service should not use bidding to obtain that service.

**Q: *It cannot be denied, of course, that bidding does reduce A-E fees.***

A: It results in lower fees being offered, but many design professionals have already learned from contractors how to obtain fees that are far larger than those they bid, by taking advantage of the client's ignorance or carelessness through change orders. The client is in a difficult position; he can do little to change the situation, and he faces a terrible predicament if he has to replace a design professional midway through a lawsuit, he has to recognize that he has a good chance of losing. In fact, by establishing his own workscope, he has performed perhaps the most important architectural or engineering service on his own, and thus should be prepared to suffer the consequence. Furthermore, dispute resolution can take years, and most of the money which changes hands ultimately finds its way into the pockets of those who earn their living from resolving others' disputes.

In addition, one must consider that it is far more expensive to participate in fee-bidding than **QBS**. When fee-bidding is employed, all interested firms almost always have to develop their own workscope, and must always develop technical and/or fee proposals. The costs involved contribute mightily to the overhead of firms which pursue fee-bid assignments. In addition, the cheap engineering which so often results from fee-bidding creates professional liability problems which, in aggregate, continually increase the cost of professional liability insurance for all insured design professionals. As such, fee-bidding over time will tend to increase the cost

of design. By contrast, when **QBS** is employed, only the one firm deemed most qualified has to develop a workscope and fee proposal, and the technical proposal. Also, because the fee which results usually is adequate to support high-quality design, fewer professional liability problems occur.

Above all, however, it is being penny-wise and pound-foolish to concentrate so much attention on design professional fees. Rather, one should do whatever is possible to reduce to overall cost of construction and life-cycle operation and maintenance. Only **QBS** can do this.

**Q: Aren't change orders imposed when QBS is used?**

A: Rarely, because contingencies for the unanticipated can be discussed and created "up front." In addition, many A-Es are reluctant to charge for minor changes, because they realize that that satisfying a client who employs **QBS** is a key to obtaining that client's next project. As such, **QBS** promotes high-quality design and client satisfaction, whereas bid-based solicitations promote mediocrity. The A-E is discouraged from proposing high-quality work, and he has no incentive to perform "above and beyond" because he knows he will get the next project only if he bids low enough. This gets us into something known as "win-win." In essence, the client says, *"I know that you are highly qualified to do this work. I am willing to pay you a reasonable, profitable fee for your services, without nickel-and-diming, and I'll provide ample allowances for contingencies. In short, if you do this project right, you should win. However, in return, I expect you to help me be a winner, too. I want the type of service which will help me eliminate unnecessary expense in construction and over the project's life-cycle, thus making the premium paid for your service a true investment."* The provider of service shares much the same attitude. Both win.

When bidding is used, a "win-lose" situation occurs. The client says, in essence, *"You have agreed to provide me certain services. I am going to get those services, no matter how much it costs you. Thus, if you miscalculate, you lose, but I win, because I'm getting more than what I paid for."* Unfortunately, the provider of service has the same kind of attitude: *"I have agreed to provide certain services that you have requested. If these services are not sufficient to meet your needs, or if you have made errors in telling me what to do, I'll give you change orders that will enhance my profitability. I'll be the winner and you'll be the loser."*

In short, when "win-win" is at work through **QBS**, the client and his provider of service share a common goal. Both benefit by helping one another reach this goal. When win-lose is in effect, either party stands to gain more when the other party makes an error.

**Q: Of course, using QBS presupposes that the owner or client really understands what he should be paying for design. If the client is not that astute, what can he do except ask for bids in order to determine what a reasonable fee is?**

A: According to a newspaper report, the city of Frederick, Maryland, wanted a new wastewater treatment plant designed. It sought bids from consulting civil engineers. The bids ranged from less the \$600,000 to more than \$2 million. Which fee was reasonable? Chances are they all were, for the type of work each comprised. If the client does not know what is or is not a reasonable price to pay, he has no business retaining a design professional by **QBS** or any other technique. An uninformed client should speak with knowledgeable peers about rates they pay, and then retain a firm to help him select others. Public clients can also use this approach, augmented by selection panels consisting of agency representatives and A-Es. These could be A-Es in private practice whose firms would be precluded from consideration while they serve, and possibly for one or two years after, or they could be retired A-Es. Many other approaches also are available.

**Q: But if bidding is not employed, what inducement is there for an A-E firm to use the kind of tight management practices that trim the fat from overhead?**

A: Not one shred of evidence suggests that firms that seek work by bids are well managed while those that do not are poorly managed. All firms must offer reasonable rates, and all must strive to trim fat if they are to prosper and grow. There is a major difference between fat and muscle, however, and bidding causes the poor manager to lose distinction between the two. Continuing education, participation in professional and technical activities, advances equipment and tools, surroundings which encourage productivity these all are essential to high-quality design, yet any or all may be sacrificed if it is essential to have the lowest possible fee. Low fees and high quality are not compatible. This does not mean that a client should condone practices which are not cost-effective. Thus, when he asks firms to submit statements of qualification, the client should ask each to discuss steps they have taken to help promote cost-effectiveness.

**Q: What about asking a firm to submit a schedule of unit prices and information about overhead and so on as part of his qualification statement materials?**

A: This can be dangerous because it can lead a client to making unwarranted assumptions. For example, a given firm may have overhead rates which are totally disproportionate to others'. Some clients thus may be inclined to overlook this firm when, in reality, its higher overhead is due to reliance on, say, computer-aided drafting and design which results in net fee savings or parity, and which, and which enhances the quality management function. Likewise, a high hourly rate may be misleading if the individual involved is particularly productive.

If the information is sought purely for informational purposes; if a firm whose rates or overhead are considered unusually high is contacted for an explanation, and if unit prices and similar information are not to be used to disqualify any interested firm (except perhaps one which cannot justify unusually high rates) or to enhance the rating of a firm with unusually low rates, then there is no harm in obtaining the information. These are major ifs, however, and - because the natural tendency is to use these dollar valves in forming evaluations - the practice is not as a general rule recommended. Again, the most important consideration of all is quality. If a firm must be paid a premium because of the quality of its particular work, chances are this premium will pay for itself quickly and many times over through near-and long-term cost savings, far less aggravation, and far more satisfaction with the finished product.

**Q: But what kind of guarantee can there be that the A-E will employ cost-effective measures even if he has them available?**

A: It must be recognized, first and foremost, the architects and consulting engineers are professionals and thus are expected to perform in a professional manner, just as physicians, attorneys, accountants and others. While naturally there are some rotten apples in every barrel, the vast majority of professionals are honest, decent individuals who do the best they possibly can for the client.

Second, especially with **QBS**, the client has ample opportunity to perform background checks on different firms if he has not already established satisfactory relationships.

Third, when **QBS** is employed, the client and his design professional have extensive interaction during the mutual workscope

development process, as well as during any prior interviews that may have been held. This gives the client ample opportunity to form "gut reactions" about the design professional. Note that this is not the case with fee-bidding. In fact, in some cases, a client will deal with a design professional solely because he submitted a low bid. In the case of a \$100,000 design project, for example, construction cost is likely to be \$1 million; life-cycle operating and maintenance costs \$10 million. The client will thus be entrusting 11-plus million dollars of his money to someone, and he will trust most that person who charges the least? This is absurd, but nonetheless it happens.

Fourth, look at things from a design professional's point of view. A client who employs **QBS** is likely to keep using it. If the design professional performs well on the first job, he is looking at the beginning of a profitable, secure long-term relationship. He thus has every incentive to perform in a trustworthy, cost-effective manner. With bidding, there is no reasonable hope for a long-term relationship. And keep this in mind; A-E's get over 80% of their business from repeat clients.

Fifth, when **QBS** is employed, the client makes it clear that the quality of the design professional's work and its impact on construction are his major concerns. Both he and the design professional have a full understanding of what is expected, and a reasonable fee is established to help assure that what is expected is delivered, with appropriate allowances for inevitable contingencies. As such, once the firm is retained, it shares a common goal with the client: Getting the work performed well, within budget, and on time. Compare that situation with what occurs when fee-bidding is employed. The client makes it clear that how much the design professional charges is at least as important as the quality of the work he produces. The client assumes that what he expects is what will be delivered, despite the fact that no mutual workscope development occurred, so the design professional may have something, while he may want to do a good job, has to watch finances. If he spends more than anticipated, he will lose money. Thus, any change at all. In other words, fee-bidding in any form tends to create a context for adversarial relationships, something which can destroy the bond of trust which should exist between any professional and his client.

**Q: In Maryland, however, it was gross corruption in A-E selection that ultimately**

**led to the resignation of the Vice President of the United States. Maryland had a QBS approach in place at the time, did it not?**

A: The approach Maryland used was **QBS** in name only. It had no significant safeguards. Most public agencies which use **QBS** incorporate sunshine and teeth in their programs. For larger projects, the need for A-E services should be broadly advertised. Sessions during which credentials are evaluated should be open to the public, or be recorded and transcribed, or summarized through careful minutes. The same applies to meetings at which proposals and fees are negotiated. In addition, there should be severe penalties for anyone attempting to subvert the system.

Bidding is hardly a defense against corruption, witness the extraordinary number of bid-rigging scandals that had surfaced in the 1970's and 80's, particularly in the area of road-building contracts. The US General Service Administration (GSA) also had been deviled by corruption in recent years. However, not on allegation of corruption had been leveled against GSA's A-E selection operations and, in fact, GSA retains more A-Es than just about any other entity in the world, and uses the **QBS** approach to the exclusion of all others.

No system yet devised by man is totally immune from corruption. If people are intent on getting around the law, they will, or at least will try to. However, it can be said that the subjective nature of a **QBS** approach in and of itself suggests that close oversight is needed. Bidding, because it seemingly is so objective, in and of itself creates an inducement for corrupt activities.

**Q: If QBS is as beneficial as you claim, why then did the Supreme Court say that the National Society of Professional Engineers (NSPE) could not restrict its members from submitting bids?**

A: NSPE attempted to justify its ethical prohibition against bidding on the grounds that engineering projects affect human health and safety, and therefore it should be against professional ethics to participate in a procurement method that erodes the quality of design professional services. The Supreme Court noted that NSPE's arguments were based on the assumption that all A-E engagements affect human health and safety, and it is just not so. Accordingly, because the prohibition was not more specific in nature, it was deemed a per se violation of the Sherman Anti-Trust Act. However, recognize that Public Law 92-582 – the Brooks Act (named for its sponsor, Rep.

Jack Brooks) – requires all agencies of the federal government – civilian and military – to obtain the services of architects and engineers on a **QBS** basis. In addition, the American Bar Association, in developing its model procurement ordinance for state and local jurisdictions, has recommended use of a **QBS** approach. Many states and localities also have adopted **QBS**-type methods.

**Q: If QBS is so good, then why are Bid-based methods being used?**

A: Because, without really going into any in-depth analysis, it appears to work well, and there are firms that are hungry enough to participate in the process. The justifications for bid-based engagements do not hold up to close review, however, because they are based on assumptions that are not valid, for example, that certain types of jobs are routine. That kind of attitude forces us to build the past into our future, and accept mediocrity as the best that can be done. Above all, we must remember that the selection and retention of an A-E are the most important aspects of a long-term process whose cost is 100 times greater than the cost of A-E fees. You are trusting the A-E to do as good a job as he possibly can, but that result cannot possibly be forthcoming by relying on an engagement method which inhibits the A-E's ability to perform well, in a fully professional manner.

We are not saying that **QBS** is perfect. However, we are saying that it is far superior to any other approach yet introduced.

**Q: Can't it be said that QBS works in the best interests of design professionals, and that arguments supporting it are motivated by self-interest?**

A: Design professionals naturally have a vested interest in maintaining professionalism. In the **QBS** helps maintain professionalism, by encouraging and rewarding it, it is true that A-Es espouse a **QBS** approach from self-interest. However, many owners, contractors and others also support **QBS** for reasons of self-interest. Design professionals absolutely do not advocate **QBS** from a self-interest that is at odds with others. The only persons who stand to lose as a result of **QBS** are those private- and public-sector procurement officials who find that other techniques are simpler for them to use, and individuals and firms who are far more adept at gaining assignments by offering cheap design, or gaining profit through legal but otherwise unprofessional business practices.