HISTORICAL BACKGROUND - LOW BID CONCEPT

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NEW YORK STATE'S EXPERIENCE WITH COMPETITIVE BIDDING

About 150 years ago, our forefathers bestowed the competitive bidding concept on us in order to curb corruption, inefficiency, and mismanagement by government officials. In New York, for example, the competitive bidding requirements of Canal Law, Sec. 30, appear to date back to legislation enacted in 1847. The principal statute that the New York State Department of Transportation now uses to bid and award highway and bridge contracts, Highway Law, Section 38, is derived from legislation enacted in 1898.[1] Through social and economic pressures, the additional terms of lowest "responsible" bidder and "public interest" determinations have also been added over the years to statutes that control the authority to let and award public works contracts.

Rational for the Lowest Bidder Concept

The statutory requirements are often considered to protect the taxpayer from extravagance, corruption, and other improper practices by public officials emerging in public works contracts, with the side effect of protecting the public official from the demands of those who seek political favors by obtaining such contracts. The bidding requirements are also intended to provide the taxpayers with the benefits of America's free enterprise system by delivering adequate, safe, and efficient transportation facilities at the lowest price that responsible, competitive bidders can offer. For an overview of these concepts, see Henry A. Cohen's 1961 treatise, *Public Construction Contracts and the Law*, and the excellent 1978 study by Ross D. Netherton of the FHWA Office of Research in *Selected Studies In Highway Law, Vol. 3.*

As Netherton observes, the public policy objectives to be promoted by competitive bidding statutes include concerns for administrative efficiency, protection of moral values, and promotion of socioeconomic goals. The policies serve to prevent favoritism in spending public funds while stimulating competition in the construction industry. The central object of the process for awarding contracts is the full and fair return for expenditure of public funds. This public interest is best served by opening bids on an equal basis to all persons able and willing to perform. A real and honest cost basis will best emerge when there is full competition among the parties.

The major objectives of competitive bidding have not changed much since *Wester v. Belote*, a case decided in Florida more than 50 years ago: to protect the public against collusive contracts, to secure fair competition on equal terms to all bidders, to remove not only collusion but temptation for collusion and opportunity for gain at public expense, to close all avenues of favoritism and fraud, to secure the best values for the public at the lowest possible expense, and to provide opportunity for exact comparison of bids in order to give equal advantage to all desiring to do business with government.[2]

The principles of competitive bidding generally require the following actions: public advertisement to bidders inviting submission of proposals; preparation of plan specifications for the work; formal submission of proposals to the contracting agency; submission of financial security by the low bidder guaranteeing his acceptance of the award; consideration of proposals under uniform criteria; and award to successful bidders.

In one audit report, it was observed that few situations are found where competitive bidding is unnecessary, and that the competitive bidding (lowest bidder) concept is generally desirable. Such desirability has been well demonstrated by such problems as the recent New York City scandals involving contracts which were not competitively bid.

Need for Change

With the current emphasis on controls over public officials, on seeing that the public money is spent prudently, why should we think that such a system should be examined and possibly changed? The answer should be obvious. Do we build 1989 model cars so they resemble the horse and buggy of the 1890s? Do we build airplanes in the 1980s that resemble the hot-air balloons of the 1850s? Hasn't government reached the point that in most instances, it is run by professionals who have the same basic desires and goals that you find in the private sector corporate world? The lowest bidder concept has served the public well over the years, but it is not necessarily the best way for governments to obtain the best product for the dollar spent.

Innovation has been a key to the success of the American economy. The person that can do something more efficiently, cheaply, or more timely generally gets ahead, but another important factor in this success story is the ability of the product to hold up under the stresses placed on it. Today, car manufacturers are providing longer and longer warranties to demonstrate the reliability of their product. How far would IBM and others, who have used innovative practices to become giants in American industry and commerce, have gotten if they had been saddled with contracting with the lowest responsible bidder as would best promote the corporate interest? Price is important, but it has become an increasing burden on considering the other necessary product requirements such as timeliness, durability, and quality.

Consider, for example, what would happen if selection of consultants utilized the competitive bidding process. (Fortunately, the Brooks Law does not permit this.) Engineering firms would reduce to a small cadre of true professionals and a large number of piece workers or hourly employees who came and went as the demands of the corporation varied. There would be little incentive to have retention or retirement plans, and employees would be constantly striving to hire another person at a cheaper rate than the present employee in order to cut expenses, to the detriment of the quality of the professional services that the consultants had been retained to provide.

There is a need to select on merit, to select on ability, and to select on product, quality and durability in some areas of public works endeavors. We must be innovative in the most costly of our public works undertakings, the construction contracts.

Collusive Bidding

There have been numerous incidents in which the competitive bidding process has not worked as smoothly as it might have in theory. Major problems have arisen in connection with competitive bidding, most notably with collusive bidding. Unfortunately, despite controls that government officials have recently come to recognize as important, such as the BAMS process, it still requires years to detect collusive bidding. In many instances, the punishment dealt out to the wrongdoer, such as finding a firm not to be a "responsible bidder," has the effect of diminishing competition and costing the public even more than the collusion. There has to be a better way of determining who is awarded public works contracts. New York State has grappled with these problems during the 1960s and again during the past few years.

In 1963, for example, the New York State Legislature responded to a bid-rigging scandal by enacting an additional requirement for the bidding process, State Finance Law, Sec. 139-d, which requires all bidders to certify in statutorily prescribed language that their bids have been arrived at independently without collusion.[3]

This did not cure the problems, and another bidding scandal occurred just a few years later. This led the state comptroller to issue audit reports on June 4, 1969, and January 15, 1971, detailing the lack of genuine competition for State contracts. On the basis of statistics for 1966 and 1967, the comptroller found that prices were within 2 percent of the published estimates for projects on which few bids were received, whereas prices were on average more than 14 percent less than the estimates for projects on which a large number of bids were received. On this basis, the comptroller strongly recommended changes in the bidding statutes and procedures.

The Prebid Estimate

The legislature responded by enacting extensive amendments to Highway Law, Sec. 38, the "lowest responsible bidder" statute mentioned earlier.[4] Although the "lowest responsible bidder" language was not changed, the earlier approach of publishing an estimate before submission of bids and prohibiting award at a price in excess of the estimate was abandoned, as inviting bids rigged to be at or near the estimate. In its place, the current approach of keeping both the estimate and the itemized bids confidential until award of the contract was established. The former prohibition against award in excess of the published estimate was, in effect, superseded by FHWA's federal-aid requirement that, when the low bid exceeded the estimate by more than 10 percent, no contract be awarded without express concurrence from FHWA.

Even these changes did not prevent further bid-rigging during the late 1970s and early 1980s. In a series of recent cases from 1984 to the present, some major contractors and material suppliers have been convicted of or pled guilty to federal racketeering and antitrust charges in New York. One of these cases involved a highway project where the low bid was almost exactly double the confidential engineer's estimate. In other cases, contractors have been charged but acquitted. Today, at lease one federal indictment against several major contractors remains pending, and is scheduled to go to trial this fall.

The administrative actions which we have taken to deal with the responsibility issues raised by these prosecutions have generated a number of challenges through civil litigation. It would go beyond the scope of our session today to delve into the details. Suffice it to say that the

New York courts have issued numerous judicial interpretations of the meaning of "lowest responsible bidder" during the past several years. The courts have ruled that, while this language does not authorize debarment, it clearly authorizes rejection of bids by indicted or convicted firms.

POSSIBILITIES FOR REFORM

Malcom B. Coate, staff economist of the Federal Trade Commission has analyzed current issues in an excellent article entitled, "Techniques for Protection Against Collusion in Sealed Bid Markets."[5]

Coate stated that collusion occurs when firms coordinate their pricing policies in an attempt to increase their profits. The likelihood of collusion depends on the ease of reaching a consensus and the ability to detect cheating on the consensus. In sealed bids, the need to consider the second factor disappears because of ex-post announcements of the winning bids. Thus, the firms need only to reach an explicit agreement on price.

To deter collusion, Coate argues, one should create an open, well-defined market to identify the costs of the project by collecting information on particular projects and bidders. All bidders should be required to disclose preexisting subcontracts and miscellaneous business relations with other potential competitors. A computer analysis of sealed bid data may identify markets where collusion is likely to occur. Every effort should be made to broaden competition. Alternative measures should be taken concerning the delayed publication of the winning bid. Bidders should be required to list price, discounts, and payment terms separately. This complicates cartel agreements by requiring collusion on more terms.

Coate also suggests the aggregations of small contracts into large lumpy contracts to increase the benefits of winning the auction. Very large contracts, so his theory goes, would induce bidders to cheat on the cartel price and win the auction with a more competitive bid. By permitting separate bids on the items, small firms may win the bids on particular projects and avoid the affects of aggregation.

However, such theories do not always work out in practice. New York tried the large contract concept during the past few years without apparent success. As an example, five highway projects on Long Island were combined into one large project, referred to as the "Super Job," with the hope of fostering genuine competition by drawing bidders from outside the immediate area. In fact, a number of potential bidders to consider were solicited to compete for the project.

However, when the bids were opened only one firm from outside Long Island had bid, and that one was from New York City. Concerns about the difficulty of obtaining materials at competitive prices and establishing workable relationships with local unions apparently convinced other potential bidders that the barriers to entry in this market were unacceptably high. Despite the obvious opportunities for economies of scale, the low bid that was received for the "Super Job" was well in excess of the total low bids for its components that had previously been rejected as unacceptably high.

Announcement of Winning Bid

Contractors opposed requirements that discount and payment terms be itemized, as this complicates the bidding system. In addition, a system that did not announce the winning bid was considered unfair because the losing firms cannot check their bid against the winner. The bidders' concerns would be minimized if the system allowed the bids to be published eventually and guaranteed the honesty of the procedure by audits.

The post-bid announcement of winning unit bids in sealed-bid markets represents an open invitation to collusive behavior. The system can be structured to minimize the incentive for collusion and the auction process can be adjusted to restore some incentives for independent behavior. A sealed-bid auction should be structured so that it is open to as many bidders as possible. Competitive cost of the project to be bid should be estimated and internal information should be gathered from each auction participant. If this fails, a randomization scheme should be introduced into occasional auctions to make it more difficult for a cartel to detect independent pricing behavior. Competition in a sealed-bid market is probable if the government undertakes a well-thought-out strategy to deter collusion.

In developing reform proposals, economic gains must be balanced against the prevention of moral hazards. When a government agency calls for bids from the interested firms and selects the lowest bidder, it cannot review the bidders' expected costs and, therefore, does not know which is the most efficient firm. Absent collusion, the bidder too must determine his bid in ignorance of the expected costs of his rivals. Such a situation led to the Pentagon scandals in which companies bought information concerning rival bids.

Moral Hazard

McAfel and McMillan[6] suggest that fixed-price contracts should be used rather than cost plus contracts because on cost plus, the contractor has no incentive to limit his costs. Potential contractors (agents) submit sealed bids on the basis of which the government (principal) selects one to

perform a task. The bidding process induces the potential agents to reveal their relative expected costs. The optimal contract trades off giving the chosen agent an incentive to limit costs against stimulating bidding competition and sharing risks. The optimal contract trades off, as in the usual principal-agent analyses, moral hazard against risk sharing. The bidding competition effect serves to reinforce the risk-sharing effect. Payment should depend on true valuation as well as bids. The gains from making payment dependent on valuation must be weighed against losses from moral hazard.

Wicks Law Contracting

Another approach to competitive bidding was relatively unsuccessful. A New York statute, known as Wicks Law, requires public building projects to be broken into four separate categories: general contractors, plumbing, heating and ventilating, and electrical. Specialty contractors bid on those items. Another requirement is that the general construction contractor cannot supervise the other three specialties, and that there is no privity of contract between the general contractor and the three specialty contractors. When bids are opened, if one segment of the four-part contract fails, generally the other three fail even if they are good bids.

On occasion, the letting agency also receives no bids on one of the specialty categories, making it difficult or impossible to award construction with a major component like electric, heating and ventilating, or plumbing left out of the overall project. There are always other problems such as specifying a large exhaust fan and forgetting to tell the general contractor to put a hole for the fan or telling the electrical contractor that he is to provide wiring for the heating and plumbing contractor to hook up his fan. For these reasons, the potential competitive benefits of the Wicks Law have often been offset by the difficulties it creates.

Other Factors

For multimillion dollar projects, it is becoming more and more obvious that there are few companies that can competitively bid that much work, so there really is a monopoly, a one-bidder concept. Also, strong anticollusion statutes prevent effective joint venturing of several smaller companies. Further, the trade unions actively campaign against nonunion contractors and exert enormous amounts of pressure on the public agencies to find those nonunion contractors to be nonresponsible in connection with submission of bids.

Every day, lists of disqualified or suspended contractors are issued. The rigors of pre- or postqualification are potentially discouraging to new firms that want to start up, but have little chance in competitive low-bid contracting. At the same time, government should not be the training school for contractors in which they attempt to provide adequate performance, but fail.

THE NEED FOR INNOVATION

Despite all these problems, just about everybody accepts the competitive bidding (lowest-bid) concept as gospel. To attempt to revise it even with the benefit of experience has been portrayed as almost un-American.

The competitive (low-bid) concept will be difficult to overcome. It has created the Ma Bells of the construction world, and they do not easily fall. It has created the labor market controls and the supply controls that work to the advantage of a few powerful firms and organizations, that will not yield easily.

The age and durability of statutes requiring competitive award of contracts to "the lowest responsible bidder" also command respect. They have served the public well over the years, under varying circumstances not always clearly foreseen by the legislators and others who developed them. We should avoid making change for change's sake. At the same time, the current system has not prevented bid-rigging, and it does not provide enough flexibility for close cooperation between design engineers and construction contractors. This is particularly true on major rehabilitation projects in densely developed urban areas, where it is extremely difficult to identify all conditions and problems at the design stage.

A way must be found that demonstrates that government officials can be good administrators, can be innovative in getting the best quality and performance for the dollar spent and that the good of the general public can be substituted for the profit motive to obtain the results that the public really desires. Incentive and disincentive clauses, timely performance, quality performance, turn key, design-build, and many other concepts, such as encouraging use of project managers who bring all of these resources together as is done in the private sector, must be considered. The term "brokerage" has become a dirty word. If we permit the obtaining of public works projects and then broker it (administer it) we are going to have to be very careful how we provide for this.

It will be our task to analyze suggestions in this country or abroad, to sort out the good from the bad, to come up with a complete system that considers all of these factors, to test it, and then to demonstrate that our proposal will work. The parochial interests of many groups

or organizations will be a major factor that we will have to deal with. Certainly, any modification that we think of has been tested somewhere, so that we can produce a good analysis of strengths and weaknesses for each of the individual aspects. We can then consolidate these concepts into an innovative approach to public bidding processes. No matter how good the resulting system appears, the abilities, honesty, and integrity of public officials, and the desire to make the system work by those that administer it will be key factors in whether the approach succeeds.

ENDNOTES

1. See *New York State Laws of 1847*, Chapter 278; Laws of 1898, Chapter 115.

2. 103 Florida 976, 138 So. 721 (1931).

3. For background, see Memorandum of the State Attorney General on Chapter 965 of the Laws of 1963, *New York State Legislative Annual*, 1963, at p. 238.

4. Laws of 1971, Chapters 938 and 1110.

5. *Antitrust Bulletin*, Winter 1985.

6. R. Preston McAfel and John McMillan. Bidding for Contract: A Principal-Agent Analysis. *Rand Journal of Economics*, Vol. 17, No. 3, Autumn 1986.