



CJE Newsletter

July 2003

Volume 4, Number 3



**Alliance for
Construction
Excellence**

Del E. Webb
School of
Construction

Arizona State
University

(480) 965-5324

ACE.ASU@asu.edu

<http://construction.asu.edu/ace>

Upcoming JOC Events

Aug 18, 2003
CJE Steering
Comm. Meeting
At ASU

Oct 6, 2003
Alternate Project
Delivery Methods
at ASU

Oct 14, 2003
CJE Fall Event.
at ASU

Nov 20-21 2003
APDM in Public
Works - JOC Nov
20, 1-5pm at ASU

Feb 4 -5, 2004
CJE Annual
Meeting at ASU

CJE Goals and Objectives

- Expand the JOC market through the education of potential users and practitioners to the benefits and practices of JOC.
- Encourage the use of 'best value' selection of JOC contractors and consultants by developing an Owner Practices & Procedures Manual including forms, guidelines and documents.
- Continuously improve the industry through performance feedback, education and training.
- Expand membership by enhancing member benefits with publications of CJE goals, activities and results.
- Enhance CJE viability through communication with current, past, and potential members.

Qualifications Based Selection in JOC

By: Gary L. Aller, Director, Alliance for Construction Excellence

One of the most important aspects of any construction project is choosing the right professional team for the job. Many aspects of the completed project depend directly on the competence, integrity, experience, and innovation of the various members of the project team. Equally important is how the project team, including the owner, work together. The suitability of the finished product for its intended purpose, the quality of workmanship, the time to occupancy, and the functional life of the product ultimately determine the life cycle cost of the project. Therefore, it is cost effective to choose the most qualified project staff possible. Qualifications Based Selection (QBS) helps assure the best long-term value for the project.

QBS is a way of choosing professional members of a project team by evaluating their unique skills, experience, and operating procedures. Historically, "professional" has been interpreted to mean architects/engineers who design the project, and QBS has traditionally been used in selecting these team members. In the public sector market, general contractors and specialty/sub-contractors have customarily been chosen by the low bid process. With the recent increase in the use of Job Order Contracting, the industry is coming to realize that each project team member is a professional and that there are many important criteria by which to evaluate them; only one of which is price. Thus, QBS is rapidly becoming the method of choice for selection of JOC firms.

This transition to QBS requires foresight and consideration of the following important issues:

- Overcoming the low bid (commodity) mentality that still pervades the industry.
- Understanding the difference between commodities and professional services.
- Understanding how QBS is used with the JOC delivery method.
- Defining appropriate objective selection criteria.
- Determining the appropriate timing for hiring the various project team members.
- Establishing alternate contract formats to serve the needs of earlier hiring.

Because the Design Bid Build method of project delivery has been so widely used, the industry is accustomed to focusing on price when choosing contractors. The low bid method of selection inherently assumes that all other factors are equal, which is clearly *never* the case.

The major barrier to the use of QBS for contractor selection is the fact that many owners don't understand the process. They assume that selection by qualifications allows too much subjective judgment to enter the process and that QBS can be equated with "personal bias based selection". Further, they assume that selection based on qualifications and selection based on price are mutually exclusive. This is an invalid assumption. When Qualification Based Selection is used for selection of

Visit the CJE Website at:

<http://construction.asu.edu/ace>

The site is updated frequently and is a source of current information about CJE activities, membership, and other news from the Alliance for Construction Excellence.

JOC contractors, price, in the form of a coefficient, is one of the criteria. The intent of QBS is that price should not be the only, nor the most important, selection criterion.

The other common misconception is that QBS does not include any competition. When used properly, QBS decisions rely on objective, quantified, and weighted criteria that can be totaled and assigned a value. In fact, QBS could accurately be referred to as **Qualifications Based Competition (QBC)**.

Firms compete on the basis of past performance, unique resources, operating procedures, staff strengths, innovation capabilities, and any other criteria deemed relevant to the project. The key that changes QBS to QBC is the use of *objective* criteria for evaluation.

Qualifications Based Selection is the process of choice, used to choose the JOC team that can deliver the best value for the duration of the contract. Value can be defined as the best product for the money spent. Value is a long-term concept. Price is a short-term concept. For a construction project, best value means assuring that the JOC projects completed under the contract fulfill these expectations:

- They serve all of the owner's needs, both immediate needs, and foreseeable future uses.
- The jobs are completed on time, meeting the schedule needs of the owner.
- Jobs are completed with attention to energy efficiency and environmental impact.
- An optimal balance of capital requirements and operating/maintenance costs is achieved.
- Quality and durability are as high as possible, minimizing long-term cost of ownership.

To assure the best value for projects, the low bid attitude must be replaced by a *lowest long-term cost* or *best value* mentality. The result will be projects that are well suited to their purpose, function efficiently, are durable, and have minimized life-cycle costs.

The technology used in the construction industry is quickly becoming very sophisticated. Such issues as "smart buildings", environmentally responsible construction, and the need for flexible-use structures have begun to transform the industry from standardized to highly specialized. The more complex the options and the faster the technology changes, the more innovative the construction solutions must be. Because of this trend, Qualifications Based Selection is no longer a luxury, but a necessity. Procuring projects using the lowest bid approach simply makes the risks of increased long-term costs and reduced functionality too great. Especially with decreasing public budgets, getting the best value on every project is a must. The use of Alternate Project Delivery Methods and the staffing of projects by Qualifications Based Selection ensure that all project team members are professionals, and can deliver the best value for the life cycle of the project.

There is no doubt that the use of Qualifications Based Competition is more complicated than using a low bid methodology. However, in the case of Job Order Contracting, this additional effort up front ensures a long, mutually beneficial relationship throughout the life of the contract. The gains realized in shorter completion times, increased quality, innovation opportunities, and reduced long-term costs of ownership far outweigh the extra effort involved.

Job Order Contracting Success Story

Owner: Loudoun County Public Schools
Leesburg, Virginia
Facility Manager – Bill Kolster

JOC Contractor: Centennial Contractors Ent., Inc.
Vienna, Virginia

Project: Parking Lot Renovation Work

In the Spring of 2001, Loudoun County Public Schools asked their JOC contractor, Centennial Contractors Enterprises, Inc., for a proposal to patch and repair certain portions of its Transportation Parking Lot. The project had critical financial constraints and the construction schedule was of concern due to bus summer storage requirements.



The scope of work made the project both expensive and difficult to schedule. Repair of the existing

paving varied from simple patching to major excavation, sub-base, base course and pavement replacement. The school district spent time over the winter to develop a design for repairing the parking surface. Their intent was to complete the work in the spring. With enormous quantities of gravel and asphalt material to be exported and new products being imported, traffic flow would further complicate the schedule and affect the project costs. The estimate for the work was approximately \$1.4 million with a 3 month completion time. Major damage to local roads was expected due to the large quantity of export and import material hauling. In short, the design was deemed too expensive, and only a portion of the lot could be completed with the budget available. Additionally, the schedule jeopardized completion before school commencement in the Fall. The Owner was not happy with the situation and turned to Centennial for help.

With time now limited, Centennial's team stepped forward, put their "creative hard hats" on and devised an alternate plan utilizing an innovative process called Full Depth Reclamation. This in-place construction process involves a large rotary cutting machine that grinds, mixes, reconsolidates and recompacts the parking lot while adding binder materials to portions of the mixture. Full Depth Reclamation reduces the amount of materials needing to be hauled in and out; reduces the amount of equipment involved in the operation; eases traffic control issues; and is more cost effective than a more traditional method of installation.

Centennial developed an estimate for this method of work addressing the entire parking area for 40% less than the estimate of the previous design. The construction schedule was predicted for 30 days. And, as a bonus, the entire parking lot area could be completely re-done – 280,000 square feet – versus about 60% of the lot described in the original scenario. The Full Depth Reclamation project completely renovated the entire parking lot improving the sub-base integrity, reducing maintenance, eliminating all defective areas and providing a clean, "new" paved surface. All materials were conserved, including recycling the milled asphalt and reclaiming of the existing sub-base material. No waste was generated. The process could be completed in the remaining weeks before the school year ended; eliminated traffic control concerns; increased production rates; minimized equipment usage; reduced the wear and tear on existing access streets; and, provided a low-maintenance product with an extended life to serve Loudoun County Public Schools for many years. The project, with stripping, was completed in **just 12 working days** – 18 days ahead of schedule, and saved the Owner \$600,000, which was used for other needed projects.

The key to these superior results is to review processes, identify changes, implement them, measure the results, and review the processes in the next IPR.

Company Profile – Centennial Contractors Enterprises, Inc.

Centennial Contractors Enterprises, Inc. is a national, general contractor specializing in the management and performance of job order contracts (JOC) for Government and institutional clients. We have been operating for 25 years, building an impressive track record that has resulted in the award of more than 50 contracts across the nation. Our individual projects or delivery orders are valued as low as \$32 to as high as \$7,300,000.

Our experience in coordinating and managing facilities support, construction, renovation, maintenance and repair projects is extensive. We have worked with owners, architects, and engineers to construct or renovate hundreds of millions of square feet of space for various Government agencies and private industry.

Through our past performance we have earned an excellent reputation for successfully managing multiple simultaneous job order contracts throughout the United States for a wide variety of customers. Each day we manage hundreds of new construction, rehabilitation and demolition delivery orders at Government and institutional facilities involving classrooms, office and commercial space, housing, computer rooms, airfields, piers, and specialized facilities like clean rooms and emergency response centers. The company has a successful record in the arena of management, construction and coordination of our project work.

Centennial is proud of the quality people we employ. We employ more than 320 individuals across the United States. We are successful in finding *and keeping* the most qualified personnel because of our rigorous selection and training processes.



*Centennial
Contractors
Enterprises,
Inc.*

**CJE
Committees:**

- Membership and Member Benefits: Tom Peeler
- Legislation: Brian Bohnsack
- Education: Ken Jayne
- Practice and Selection: Gary Aller/Dan McCausland
- Performance-Based: Dean Kashiwagi

CJE Officers:

- Industry Chair: Tom Peeler
- Academic Chair: Dean Kashiwagi
- ACE Director: Gary Aller
- Education Chair/Industry Chair Elect: Ken Jayne
- Past Industry Chair: Rich Barrick
- Ex-Officio: Bill Sweetser
- Ex-Officio: David Pinkerd
- Ex-Officio: Ron Crawford

Our corporate office is located in Vienna, Virginia about fifteen miles from the U.S. Capitol. Project offices are located across 22 states in the United States where our contracts are in place. We maintain a strong local presence in each of these areas and well-established relationships with thousands of local subcontractors who have worked with us on job order contracts and other construction projects. We continue to expand our operations as successful ventures generate new opportunities.

CJE Membership – What are the benefits?

Bill Sweetser of Centennial Contractors, featured above in this issue’s case study, sums it up very well.

“CJE provides us with the opportunity to interact with many owners who use JOC, helping us to better understand owner needs and expectations. CJE events keep us up to date on trends in the industry: legislation and regulations impacting JOC; ten year contract durations; bonding approaches; software developments and the like. CJE is the voice of the JOC industry. There is no other organization like it.”

Tom Peeler of Mohave Educational Services Cooperative adds:

“Job Order Contracting is a valuable alternative project delivery method for construction contracting. It provides an economical and efficient option for many projects. However, it is new to most public entities and there is a lot to learn. CJE is an excellent resource for anyone interested in establishing a successful Job Order Contracting program.”

Annual Membership Dues*

Facility Owners	\$575
Contractors, Subcontractors, Consultants and Vendors:	\$1750

*Dues includes membership in the Alliance for Construction Excellence as well as CJE

Current Members

<p>Basic Industries - Richard Barrick</p> <p>Applied Innovative Mgmt. - Ken Jayne</p> <p>3D International - Ron Crawford</p> <p>Centennial Contractors Ent., Inc. -Bill Sweetser</p> <p>City of Phoenix - Wylie Bearup</p> <p>Corbins Electric - Mark Fleming</p> <p>CEFPI - Janell Weihs</p> <p>Jamail Const. - Dave Pinkerd</p> <p>The Gordian Group, Inc. - Clint Owings</p> <p>Loudon County Public Schools - William Kolster</p> <p>Mohave Educational Services Coop - Tom Peeler</p>	<p>Northside ISD - Joseph Martin</p> <p>Pinnacle One - Dan McCausland</p> <p>RS Means - Bob Gair</p> <p>Sentinel Industries - Paralee White</p> <p>Shughart Thomson & Kilroy - Mike Ladino</p> <p>SDB, Inc. - Marco Spagnuolo</p> <p>Smith Woods Contracting - Gary Patton</p> <p>TCPN – Region IV Educ, Serv. Ctr. - Stuart Verdon</p>
---	---