




MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMISSION MEMORANDUM

TO: Mayor Matti Herrera Bower and Members of the City Commission

FROM: Jorge M. Gonzalez, City Manager 

DATE: June 3, 2009

SUBJECT: **REFERRAL TO THE FINANCE AND CITYWIDE PROJECTS COMMITTEE – JOB ORDER CONTRACTING (JOC) SYSTEM FOR ACHIEVING TIMELY AND COST-EFFECTIVE PROCUREMENT OF MAINTENANCE AND CONSTRUCTION SERVICES FOR CAPITAL PROJECTS.**

ADMINISTRATION RECOMMENDATION

Refer the item.

BRIEF HISTORY OF JOB ORDER CONTRACTING (JOC)

JOC was developed in the early 1980's to help the Department of Defense (DOD) expedite the procurement of repair, alteration, and minor new construction projects in support of their military facilities worldwide. DOD was looking for a procurement system to decrease the inherent inefficiencies in the typical design-bid-construct cycle when applied to a large volume of small to medium sized construction projects. The initial results and benefits experienced by DOD were so positive that within a few years the JOC procurement system was implemented at virtually every major DOD installation worldwide.

Beginning in the early 1990's, non-DOD public facilities owners became aware of the substantial benefits of the JOC procurement system and began adopting JOC. Thus, JOC began rapidly migrating outside the DOD and fast became a heavily utilized tool by municipal governments, state agencies, K-12 public schools systems, utility and transportation authorities, colleges, universities, and public housing authorities. Today JOC is used in almost every major metropolitan market to quickly and efficiently procure over \$1.5 billion annually in repair, alteration, and minor new construction projects.

JOC was the brainchild of Mr. Harry Mellon, the founder of The Gordian Group (TGG). In 1982 when Mr. Mellon was serving in the U.S Army Corps of Engineers, he was responsible for JOC's creation, testing and full-scale adoption by the U.S Army worldwide and its migration to the DOD. Mr. Mellon will attend the Finance and Citywide Projects Committee meeting to provide members of said committee with information relative to the JOC system.

Agenda Item C4C
Date 6-3-09

HOW JOB ORDER CONTRACTING WORKS

A JOC construction contract is built around a set of contract documents. The City of Miami Beach's JOC contract documents consist of three (3) parts:

1. Part one is a Construction Task Catalog (CTC), that contains a wide variety of construction and construction related tasks. Each task has a complete and detailed description, a unit of measure, and a fixed unit price. For example, a square foot of interior painting, a lineal foot of rigid conduit, and a square yard of carpet all have a certain associated price. The unit prices include the direct cost of labor, material, and equipment in the local market. The unit prices for some tasks are modified for large or small quantities, non-typical installation locations (i.e. in confined space), or non-typical materials (i.e. stainless steel). The tasks in the CTC are developed and tailored specifically for the City of Miami Beach and encompass all the work that the City of Miami Beach anticipates completing under JOC.
2. Part two of the contract documents is a set of performance based Technical Specifications arranged according to the standard divisions of the Construction Specification Institute's (CSI) Master Format recognized by and familiar to bidders. The Technical Specifications reflect the City of Miami Beach's standards for the quality of workmanship and materials, and set the standard for the quality of work.
3. Part three consists of the Information for Bidders, form of contract, General Conditions, bond forms, wage rate information, etc.

GUIDANCE TO BIDDERS

During the bidding process, bidders are not told the exact tasks that they will be asked to perform. No commitments are made about specific quantities that will be ordered from the CTC.

The City informs bidders of some specific contract characteristics that are unique to JOC, such as:

1. Each JOC contract will have a definitive term. Each contract features an initial base term of 1 year from the date of contract award. In addition, each contract also includes an option for additional years based on the contract issued. The total term of the JOC contract cannot exceed the specified number of years.
2. There are no minimum contract values in the contract. However, there is a not to exceed Maximum Contract Value based on the contract. Bidders are advised that the City of Miami Beach is not obligated to award any work during the entire term of the contract.
3. A pre-bid meeting is held with all potential bidders. The contractors are given an overview of JOC and encouraged to ask questions about how it works. The pre-bid meeting is conducted as a workshop and the mechanics of being a Job Order Contractor are explained. Contractors are given guidance on analyzing the CTC,

how to calculate Adjustment Factors, how to develop a Price Proposal, personnel requirements to staff a Job Order Contract, and generally how to be successful under the JOC system.

CONTRACTOR SELECTION PROCESS

Based on the Construction Task Catalog, the other bid documents, and the guidance provided at the pre-bid meeting, bidders competitively bid a set number of Adjustment Factors to be applied to the unit prices in the CTC. The Adjustment Factors apply to performing work (1) during normal working hours, (2) during other than normal working hours, and (3) relating to tasks not pre-priced by the CTC.

The Adjustment Factors must include all of the contractor's indirect costs such as overhead, insurance, and bonds, as well as the contractor's profit. The Adjustment Factors apply to every task in the CTC. Adjustment Factors can vary widely among different facility owners and contracts based on a host of factors including the Maximum Contract Value, the type of work anticipated, and the locations and conditions under which the work will likely be executed. If a bidder views the CTC as equal to the direct cost of performing the work in the local marketplace, and desires 10% for overhead and 10% for profit, it would bid 1.2000. Furthermore, if the bidder believes that work to be completed during other than normal hours will require higher wages to be paid than work completed during normal hours, it would incorporate a premium into the Adjustment Factor.

Each Adjustment Factor is weighted (as determined prior to the bid and indicated on the bid form) and an award criteria figure is calculated. The award is made to the bidder providing the lowest (lowest and best award criteria figure), responsible and responsive bid. The contractor must also provide a statement of qualifications that demonstrating certain skill sets, licenses, and similar experience to be determined responsible and meet criteria under "Best Value Procurement".

CONTRACT EXECUTION

Once the City has executed a Job Order Contract with each contractor, they are standing by available to perform work when called upon. The JOC execution process begins with the identification of a project, an understanding of the general scope of work associated with the project, and a preliminary cost estimate prepared by the Project Manager. After these preliminary steps are completed, the Project Manager conducts a Joint Scope Meeting with the Contractor at the work site to review the proposed general scope of work and evaluate the work site conditions. The contractor is invited to ask questions and make suggestions.

After the Joint Scope Meeting, the Project Manager provides the contractor with a written Detailed Scope of Work. The level of detail and design included in the Detailed Scope of Work is a function of the difficulty and type of the particular project. The contractor then breaks the work down into individual items of work and prepares a pricing Proposal by selecting the unit price tasks contained in the CTC to accomplish the Detailed Scope of Work. The total price is calculated by multiplying each unit price by the required quantity and then multiplying that result by the appropriate Adjustment Factor. Along with the Proposal, the contractor also develops a schedule, a list of subcontractors, and any required drawings or sketches.

The Proposal is then compared to the City's in-house estimate and reviewed to make sure the contractor selected the correct tasks and appropriate quantities. If the Project Manager is satisfied that the Proposal is accurate and the price is reasonable then a firm fixed priced, lump sum Job Order can be issued to the contractor. The contractor is required to complete the Detailed Scope of Work for the lump sum price within the agreed upon schedule.

Once the work begins, the Project Manager reviews submittals, inspects the work, monitors progress, approves payments and closes out the job in accordance with typical the City of Miami Beach procedures. No variations from the procedures are permitted.

CONTRACTOR'S CONTINUING FINANCIAL INCENTIVE

The major advantage of the JOC system is that the stream of individual Job Orders gives the contractor a continuing financial incentive to provide high quality work on schedule. The incentive exists because each Job Order only represents a small portion of the total potential dollar value of the contract. By meeting the City of Miami Beach expectations for quality and timeliness, the contractor will likely be requested to perform additional Job Orders. If, however, the City is not satisfied with the performance of the contractor, then the City may elect not to have the contractor perform any additional work and the stream of Job Orders is terminated.

GOALS AND BENEFITS

Owners use Job Order Contracting because other available construction procurement alternatives do not enable them to meet their goals. Their goals almost always include the need to accomplish their construction requirements in a timely manner while increasing quality and reducing cost.

INCREASED RESPONSIVENESS

Independent studies show that under JOC, work can start between 75-85% faster than traditional contracting methods. These studies show that, for small projects (less than \$20,000), the average procurement time using the traditional system is as much as 233 days compared to only 42 days under JOC, a savings of 82%. For medium sized projects, the time required in the traditional system is 193 days, compared to only 52 days under JOC, a savings of 75%.

LOWER COSTS

Independent studies further show that using JOC can save a facility owner between 8-15percent in total costs compared to traditional contracting methods. These cost savings occur from reduced design costs, lower procurement costs, lower direct construction costs, and reduced post award costs.

REDUCED DESIGN COSTS

Design costs are reduced because the scope of a majority of the JOC projects can be documented without having to develop full design documents. In those cases where some design is required, the design only needs to be completed to the point of being priceable and

capable of being permitted, not biddable. For every project, the Technical Specifications are already developed as part of the basic JOC contract. Design savings range from 2-6% of the cost of construction.

LOWER PROCUREMENT COSTS

Procurement costs are reduced because the facility owner does not have to develop, advertise, and award individual contracts for every small to medium sized project. The cost of reproducing the contract documents alone can range from ½-1% of the overall cost of construction. The average procurement cost using traditional procurement methods for medium sized projects is 4%. Under JOC, the cost drops to 1.6%. Typical overall procurement savings can range from 2-4%.

LOWER DIRECT CONSTRUCTION COSTS

Studies show that when analyzing comparable work, JOC is 4-8% less expensive because of reduced indirect costs, the absence of large contingencies, and volume discounts provided by contractors. For example, if you consider a single project that is advertised under the traditional system, bidders will include in their bid anticipated overhead costs for the full duration of the project. These costs will represent both field and home office costs. Under JOC, the contractors spread their anticipated overhead over the entire contract and, therefore, the individual overhead allocation against any one project is a small percentage of the total overhead considered. Other studies show that when developing their JOC bid, contractors will lower their contingency costs because they have the opportunity to participate in Joint Scope Meetings and inspect each project prior to developing the Proposal for that project.

REDUCED POST AWARD COSTS

JOC reduces costs by eliminating change orders and the resulting negotiations. Post award costs primarily result from change orders and claims. Under JOC, the contractor participates in the Joint Scope Meeting and any issues or problems are discussed openly and resolved. If a question arises during the Proposal development process, the contractor is free to contact the facility owner's representative and get answers. This non-adversarial relationship eliminates the underlying cause of most claims and changes. Post award costs are further reduced because JOC is a series of individual Job Orders, and it is generally not in the contractor's best interest to submit frivolous claims that may affect its future volume of work under the contract.

Changes in the Detailed Scope of Work, often a result of differing or unknown site conditions, are handled as additional Job Orders rather than change orders. Post award cost savings under JOC have consistently proven to save 1-3% of the cost of construction.

ENHANCED OPPORTUNITIES FOR MINORITY BUSINESSES

JOC is designed to enhance the participation of local, minority, and women-owned businesses. Because no commitment is made to the JOC contractor regarding specific projects or the exact types of work that will be required, the contractor cannot develop an in-house work force to do all the work and is forced to maximize the use of subcontractors. This increases the opportunities for the contractor to use local, minority, and female owned businesses. Over the past 5 years, 40% of all JOC work has been subcontracted to businesses in these categories.

In addition, minority businesses strongly support JOC because they are able to receive large amounts of work without the official red tape normally associated with bidding. They also support JOC because it does not tie up their bonding capacity. They get the work fast and get paid fast. JOC has enabled many minority firms to do government work for the first time.

INCORPORATION OF MULTIPLE FUNDING SOURCES

Under JOC, the obligation document is the individual Job Order and not the basic contract. Therefore, individual Job Orders can be paid from different funding sources. This capability is not available with any other form of competitively bid, firm fixed priced construction contract.

JOC provides the facility owner with a single, highly flexible and responsive tool for accomplishing a majority of its annual construction and repair projects regardless of the source of the funds.

HIGHER QUALITY CONSTRUCTION

Because the structure of JOC is a series of individual Job Orders, the contractor has an ongoing financial incentive to provide a quality project. If the contractor fails to maintain the desired level of service and quality, the owner can elect to give future projects to other JOC contractors or to complete the projects using traditional contracts.

The “contractual motivation” under JOC is the complete reverse of the traditional system where the contractor has been awarded a one time, fixed priced contract. Under the traditional procurement system, the contractor is motivated to make as much money as possible off that one opportunity. The contractor typically does so by cutting corners and submitting frivolous requests for claims and change orders. This sort of behavior does not occur under JOC because it would convince the facility owner not to give the contractor future Job Orders.

GOALS AND BENEFITS-CONTRACTORS

Contractors bid Job Order Contracts because of the rewards. The primary reward is that JOC can be profitable. The level of profit, however, depends upon many variables. A few of these variables include the contractor’s Adjustment Factor, management capability, volume of work, and consistency of workflow. The contractor does not have to expend business development resources to find the next project. As long as the contractor meets or exceeds the City expectations, it will likely continue to receive projects up to the Maximum Contract Value.

Ideally, a long-term partnership will develop between the City and the contractors. The JOC contract structure fosters a continuing, non-adversarial relationship that allows the contractor to function as a partner in the development of each Job Order. The contractor becomes an important source of information with regard to construction expertise during Job Order development. There is normally a high level of diversity among the Job Orders and an ability to help solve the City facility and infrastructure problems keeping the overall contract interesting and rewarding.

JOC HAS BEEN APPROVED FOR USE BY THE GENERAL ACCOUNTING OFFICE

The General Accounting Office (GAO) has fully reviewed the JOC concept and found it to be consistent with all Federal procurement laws and policies. Therefore, any federal funds received by the City can be obligated through the JOC process.

The JOC concept was designed with internal controls as an integral part of the check and balance process. The JOC concept relies on automated software, which provides an excellent audit trail of all JOC work orders and transactions as well as various verification programs to ensure the integrity of the JOC database.

The JOC System provides for procurement of an "annual General Contractors" through a traditional bid process. An indefinite quantity contract is established with fixed unit prices, against which work orders are issued for individual projects.

CITY OF MIAMI BEACH SUCCESS STORY

In 2003, recognizing the City's dynamic environment and the need for a more responsive contracting technique for the accomplishment of maintenance, repair and construction projects, the City implemented a Job Order Contracting (JOC) system as an innovative contracting system to enhance responsiveness while providing a higher level of quality work at a lower cost. The JOC system has proven to be a successful and cost-effective procurement approach that has earned itself top honors for best practices in public procurement by the National Institute of Governmental Purchasing.

As of May 28, 2009, the JOC program has resulted in the completion and issuance of 369 job orders totaling \$100,846,064. It is important to note that there have been no contractor-initiated change orders or litigation on any JOC project to date.

CONCLUSION

In summary, the Job Order Contracting System will enable the City to achieve its primary objective of being able to "more rapidly engage contractors" while lowering costs and strengthening internal controls. JOC does not replace any of the existing contracting systems including traditional bidding. JOC is just an efficient and effective tool for the City to use in accomplishing its facilities maintenance and construction program.

JMG: ~~TM~~:FB:GL

T:\AGENDA\2009\June 3\Consent\JOC Referral Memo - 06 03 09.doc

THIS PAGE INTENTIONALLY LEFT BLANK