

December 2, 2015

**TO:** Thomas Carruthers, Interim City Attorney

**FROM:** James A. Dickens, Assistant City Attorney

**SUBJECT:** Should City Council Authorize the City Manager to Use the Construction Management at Risk delivery method to construct the Coliseum Fieldhouse Renovations Project Pursuant to N.C.G.S. §143-128.1(e)

City staff proposes to construct the Coliseum Fieldhouse Renovations Project using the Construction Manager at Risk services. City staff has evaluated the advantages and disadvantages of using the Construction Manager at Risk delivery method for this project in lieu of the separate prime, single prime, and dual bidding delivery methods as required by N.C.G.S. 143-128.1(e).

The City normally uses the single prime delivery method to construct City buildings. In the single prime delivery method, the City contracts with an architect to design the building. Once the design is completed, the City selects a licensed general contractor called the Prime Contractor ("Prime") to construct the building. The Prime is selected from a public bidding process as the lowest, responsible, responsive bidder. The Prime is responsible for hiring and managing the sub-contractors.

In projects where the cost of the building exceeds \$500,000, the Prime bidders must list in their bids the sub-contractors they intend to use for (1) heating, ventilating, and air conditioning; (2) plumbing; (3) electrical; and, if different from the Prime, (4) general. The Prime's bid price is the price that the City agrees to pay the Prime to construct the building. The Prime and the architects who design the building have separate contracts with the City, and the design is performed prior to the selection of the Prime; therefore, when there are problems during the construction of the building, both the architect and the Prime point the finger at each other, and it is often difficult, if not impossible to assess responsibility for errors in these situations.

The separate prime delivery method, also called "Multi-Prime", is when a public entity contracts with multiple Prime Contractors to construct the building. Each Prime is contracted to perform work that is typically sub-contracted in the single prime delivery method. Thus, instead of the City hiring one Prime Contractor to manage all of the sub-contractors during construction, the City would enter into separate contracts with each of these sub-contractors as Primes, and the City would be responsible for managing all of these Primes during the construction of the

building. The City has not used the separate prime delivery method in many years, since North Carolina law was changed to allow for single-prime construction.

The dual bidding delivery method is a combination of the single prime and the separate prime delivery method. In dual bidding, the City would bid out the construction of the building to a single Prime Contractor and to separate Prime Contractors for each of the major sub-contracting areas referenced above. The City would then have the option of accepting the bid that is most advantageous to it.

In constructing a building using the Construction Manager at Risk delivery method, the City contracts with an architect to design the building and a Construction Manager (“CM”), usually a general contractor, to manage and oversee the construction of the building on behalf of the City. Beginning in the 3<sup>rd</sup> month of the Schematic Design of the building, the CM will work with the architects and the other design professionals to help identify issues in their design of the building that might delay the construction of the building or necessitate change orders due to the design not accounting for the issues and the practical realities of construction (“constructability”). During the design process, the CM will also estimate the actual costs to construct the building that is being designed by the architects and other design professionals. Once the design of the building is completed, the CM will re-review the final design for constructability, and identify any observed problems, which the design team will then address. The CM will then calculate a Guaranteed Maximum Price (“GMP”) and propose this price to the City as the contract “not-to-exceed” amount to construct the building. The CM is “at-risk”, because the CM will be responsible for any costs above the GMP that were observable and foreseeable from the Construction Documents at the time of the CM’s constructability review (although changes to the design during construction or to the CM’s scope of work will increase the GMP, just a deletions in scope will decrease the GMP). During construction of the building, the CM has the ability break up segments of the work into smaller sub-contracts that will allow more M/WBE firms to participate in the construction of the building.

City staff concludes that the Construction Manager at Risk is the best method for constructing the Coliseum Fieldhouse Renovations Project for the following reasons:

1. Reduction in Significant Change Orders- In the Construction Manager at Risk delivery method, the CM will be involved in reviewing the design of the building as the City’s agent and be able to identify potential design errors and constructability issues during the design phases. Correcting these errors during the design phase has the potential to reduce the number of change orders that may be necessary on this project. In the separate prime, single prime, and dual bidding methods, the City does not have anyone performing the role of the CM during the design phase; thus, any errors in the design or any “constructability” issues are not discovered until actual construction begins, and the correction of these design errors usually delays construction by several days or weeks and costs additional money via change orders.
2. Cost Control- The CM will be estimating the construction costs during the design phase, and if the costs will exceed the City’s construction budget, the CM can assist in the process to modify the design to meet the budget (sometimes called “value engineering”) during the design phase. This is the least expensive time to change the design, and it is much less costly than

resolving these issues in the field by change order. Also, once the CM sets the GMP, the CM will be responsible for many additional costs; therefore, the CM has two separate reasons to keep costs down and reduce cost overruns. First, the CM, as the City's agent, has a responsibility to manage the construction process in the best interests of the City. Second, since the CM is responsible for any reasonably anticipated costs that exceed the GMP, the CM has a financial incentive to manage costs to restrict cost overruns to ensure that the construction costs do not exceed the GMP.

3. Fast Tracking Specific Parts of Construction - As a Construction Manager at Risk, the CM can begin construction of some parts of the work prior to the final design being completed. Under the other delivery methods, the design must be fully completed before the bidding for the contractor to construct the building can occur. Thus, for projects that need to be started quickly and on a strict time schedule, like this one, the Construction Manager at Risk delivery method offers time advantages, which will translate, hopefully, into less construction time, and a lower project construction price.

4. CM Selected by Qualifications, Not Price- In the Construction Manager at Risk delivery method, the CM is selected by their qualifications pursuant to the Mini-Brooks Act just like architects and engineers. In the other delivery methods, the City is required to contract with the lowest, responsive, responsible bidder. Selecting a CM by a comparison of qualifications is particularly appealing for this project due its size and complexity. Additionally, due to the new law passed by the general assembly, the City cannot pre-qualify Prime Contractors under the other delivery methods. In selecting the CM, however, the City can use "[e]xamples of prior completed work [to determine] demonstrated competence and qualification of professional services." This allows the City to select a CM that can best achieve the objectives identified above.

5. Increased Opportunities for M/WBE Participation- In the Construction Manager at Risk delivery method, the CM is responsible for breaking out the bid packages, and the CM can bid out smaller portions of the work so that M/WBE firms can participate on the project. The Construction Manager at Risk is the best delivery method to accomplish this task, because in the other delivery methods, the Prime Contractor is solely responsible for developing the sub-contracting opportunities. The City offers suggested sub-contracting opportunities in these other delivery methods, but the Prime Contractor is not required to adopt them. In the Construction Manager at Risk method, the CM, who is the City's advisor until the GMP is set, is responsible for offering the sub-contracting opportunities, and the 20% M/WBE goal will be a part of CM's contract.

6. Experience of Other Municipalities- In an article in the Fall 2004 issue of Popular Government, a magazine published by the North Carolina School of Government, entitled "Public Construction Contracting: Choosing the Right Project-Delivery Method", the author, Valerie Rose Riecke, conducted a study among North Carolina municipalities, and the results of her study were that among municipalities that had used the Construction Manager at Risk delivery method, 73% of those surveyed responded that costs were always met and usually reduced because the CM assumed the financial risk associated with any profit or loss. These municipalities also stated that the CM being involved in all project phases allowed for more

opportunities for value engineering and cost estimating, which helped to control costs. 53% of those surveyed stated that project schedule was always met and usually accelerated, and 47 % stated that the schedule was typically met. In meeting the functional and aesthetic goals of the project, most of the survey participants stated that municipalities have the greatest chance for a quality project using the Construction Manager at Risk.

These six advantages far outweigh the disadvantages in using the Construction Manager at Risk delivery method for this project. One of the disadvantages that is typically noted in Construction Manager at Risk projects is that it requires a high level of communication between the City and the CM. City staff is making communications with the CM and the Donor Building Committee a top priority. Another disadvantage is that the Construction Manager at Risk requires the City to negotiate a contract with the CM that recognizes the relationships between the CM and the designer, Moser, Mayer, Phoenix and Associates, PA. While there will exist some tension between the designer and the CM, City Staff will vigilantly monitor their interactions to ensure that delays and additional design fees are not incurred.

In sum, City staff recommends that the City Council adopt a resolution concluding that after comparing the advantages and disadvantages of using the Construction Management at Risk method for this project in lieu of the separate prime, single prime and dual bidding delivery methods, the City Council authorizes the City Manager to use the Construction Management at Risk delivery method to construct the Coliseum Fieldhouse Renovations Project.