

DATE ISSUED: November 21, 2003 REPORT NO. 03-239  
ATTENTION: Honorable Mayor and City Council  
Docket of November 24, 2003  
SUBJECT: Construction Manager at Risk  
REFERENCE: Manager's Report 03-209, issued October 17, 2003

SUMMARY

Issue:

1. Should the City Council place on the March 2004 ballot a proposed amendment to the City Charter that would allow the use of Construction Manager at Risk (CM At Risk)?
2. Should the City Council direct staff to work with the local construction industry in developing an implementing ordinance for CM At Risk, in anticipation of voter approval in the March 2004 elections?
3. Should the City Council A. direct the City Attorney to prepare a ballot title and summary; B. direct the City Attorney to prepare and impartial analysis; C. direct the City Manager to prepare a fiscal analysis, and D. Assign authorship of the ballot argument related to the proposed ballot proposition regarding Construction Manager At Risk Contracts?

Manager's Recommendation:

1. Authorize placement of the proposed Charter Amendment permitting the City's use of CM At Risk on the March 2004 ballot.

2. Direct staff to work with the local construction industry in developing an implementing ordinance for CM At Risk, in anticipation of voter approval in the March 2004 elections.
3. Direct the City Attorney to prepare a ballot title and summary; B. direct the City Attorney to prepare and impartial analysis; C. direct the City Manager to prepare a fiscal analysis, and D. Assign authorship of the ballot argument related to the proposed ballot proposition regarding Construction Manager At Risk Contracts.

Other Recommendations - None

Fiscal Impact:

None; election expense cost sharing procedures have been revised so that additional ballot measures do not increase the City share of the expense. While not quantifiable, the proposed CM at Risk process provides opportunities to save costs on future construction projects.

BACKGROUND

Following approval at the Rules Committee meeting of October 22, 2003, the CM At Risk process went to the City Council on November 3, 2003 when it was continued to allow staff additional time to work with the contracting community.

As noted in the 03-209 Manager's Report, CM At Risk is another tool for managing construction projects. It is used by cities, counties, school districts, public universities and the private sector.

As the title describes, the construction manager is at risk for delivering a project for a Guaranteed Maximum Price (GMP). Moreover, as the design work begins, both the construction manager and the architect actively collaborate on identifying problem areas, design ambiguities or gaps, constructability issues (how the project will actually be built), and opportunities for cost savings, referred to a value engineering.

Under CM At Risk, the City would receive a Guaranteed Maximum Price which might be below, at or above an original estimate, but once the GMP has been agreed upon, there are no further cost increases unless a.) the City initiates subsequent design changes, or b.) there are unforeseen site conditions. As a result, the City is afforded a significant degree of certitude over project construction costs once the GMP has been accepted and approved.

Moreover, the collaboration among team members means that the project receives significant scrutiny, particularly with the construction manager at risk for costs that exceed the GMP.

The ideal CM At Risk project would begin with the simultaneous selection of both the architect and the construction manager, so that collaboration begins immediately. Typically, the construction manager would provide the following pre-construction project management services.

<u>Phase</u>	<u>CM Services</u>
I. Planning	<ul style="list-style-type: none"> <li>· Validate initial budget.</li> <li>· Provide conceptual cost estimate.</li> </ul>
II. Schematic Design	<ul style="list-style-type: none"> <li>· Partnering Sessions with key participants.</li> <li>· Develop Critical Path Management schedule.</li> <li>· Conduct design reviews.</li> <li>· Develop Schematic Design cost estimate.</li> <li>· Conduct value engineering analyses.</li> <li>· Develop construction phasing plan.</li> </ul>
III. Design Development	<ul style="list-style-type: none"> <li>· Design Development cost estimate.</li> <li>· Design reviews.</li> <li>· Construction planning.</li> <li>· Update schedule.</li> <li>· Develop bid package strategy.</li> <li>· Develop prequalification criteria.</li> </ul>
IV. Construction Documents	<ul style="list-style-type: none"> <li>· Conduct constructability review</li> <li>· Provide construction document level cost estimate.</li> <li>· Develop Quality Insurance Program</li> <li>· Bid and Award</li> </ul>

As such, all of the above processes and services are almost identical to existing provisions and practices related to Design/Build, which was approved by the voters a few years ago. In fact, the principal difference between Design/Build and CM At Risk lies in their application by the owner. Design/Build provides the owner with a single point of contact, usually through a joint venture between and architect and a construction manager.

CM At Risk is used when an architect has already been retained, such as with the Main Library Project, or when a community or City Council wishes to retain a specific architect for a project. Its structure affords greater control of the architectural design throughout the entire process. This is in contrast to Design/Build, where owner control of the design is generally much less once an

initial design concept has been approved. It should be emphasized that none of the various project management alternatives, including CM At Risk, have any impact on the applicability and enforcement of existing contract and labor laws, nor do they determine (or are they affected by) policy decisions with respect to prevailing wages or project labor agreements.

## WORKSHOPS

Three workshops (November 13, 14 and 19) were held with local construction industry representatives in order to reach a common understanding about the CM At Risk process and to discuss outstanding issues and concerns. These workshops were well attended and included representatives from the following entities:

- American Subcontractors Association
- Associated Building Contractors
- Association of General Contractors
- Engineering and General Contractors Association
- Latino Builders Association
- Multi Cultural Contractors Group
- National Electrical Contractors Association

In addition, as of the writing of this report, a fourth presentation was scheduled for the Public Works Advisory Committee meeting of November 21, 2003.

It should be emphasized from the outset that while there was general agreement on many of the general principles related to CM At Risk, there was also often very differing points of view when addressing the specific uses and procedures when actually using CM At Risk.

In identifying issues, the task of staff was to develop as many points of agreement as possible while still affording the flexibility necessary when addressing future construction projects, whose type, scope and schedule demands cannot be predicted.

While some representatives, such as the Latino Builders Association, the Multi Cultural Contractors Group and the Associated Building Contractors, were generally in favor of CM At Risk, others, including the National Electrical Contractors Association, the Engineering and General Contractors Association, and the American Subcontractors Association had several significant points of disagreement with the method as proposed by the City Manager's Office.

These points of dispute are discussed below:

1. Inclusion of Major Subcontractors at the Time the Construction Manager is Selected.

As with Design/Build, the construction manager would be selected on a qualifications-driven competitive process that examines prospective firms' prior experience, bonding capacity, schedule availability and a host of other related factors.

The firms do not compete on the cost of the project, as the GMP is developed later. Similarly, the construction manager's fixed fee (which includes profit and general conditions) is negotiated after a construction management firm has been selected.

The representatives opposing the City's position want the City to require that the prospective construction management firms must include the MEP (mechanical, electrical and plumbing) trades as part of their team, arguing that initial formation of the team is essential in order to ensure that project collaboration begins immediately.

City staff believes a better approach is to not uniformly require such teams, but rather to give the construction manager the option to form or not form these supporting teams, if so desired. There are two principal advantages with this recommended approach:

1. It offers needed flexibility – it is impossible to predict future projects and their specific needs, or the delivery and management requirements of the City.
2. It may not be possible for a construction management firm to know at the very outset what the most appropriate MEP firms are to team up with until sufficient detail regarding owner needs, and program and performance specifications have been sufficiently detailed. This is particularly important when addressing technological issues, where costs and capabilities can change very quickly.

However, in those instances where the plans and specifications are fully developed, then yes, certainly it would make sense to have the MEPs on board at the very beginning. Again the key is to retain the flexibility necessary to have the project team make the best choice for a given project.

## 2. Kinds of Projects Authorized for CM At Risk.

Several of the spokespersons have requested that the City limit the use of CM At Risk to only building projects and that undergrounding and road projects be specifically excluded.

Again, staff believes that flexibility in the use of CM At Risk is of great importance because, as stated earlier, it is impossible to predict future requirements.

There is no fundamental reason why roadway or undergrounding work should be excluded from CM At Risk, and in fact such projects are ideally suited for this process.

Opponents to this position argue that the contractor is placed at great risk of paying for costs related to unforeseen site conditions.

Staff's position is that exposure to these risks is not a function of any particular project delivery tool, but more a function of that specific project manager's skills, the demands of that project and the skills of that contractor – regardless of delivery method. Protection from unforeseen site conditions is not guaranteed under any known project management

approach; in such instances, the level of risk is managed – but not eliminated – through professional and thorough geotechnical analyses and appropriate project contingencies for these types of projects.

3. Establishment of a Dollar Limit for CM At Risk Projects.

Spokespersons also want the City to limit the use of CM At Risk only to projects valued at \$10 million or greater.

Again, for the same aforementioned reasons, staff argues the need for flexibility, with no specific minimum, which is already the case with our existing Design/Build ordinance.

As an alternative for consideration, staff believes that a \$3 million minimum might work, with the proviso that the City Council could waive the \$3 million minimum if it made a finding that public health and safety requirements made such a waiver necessary

4. Mandated Project Contingencies for CM At Risk Projects.

Spokespersons also want the City to require a 10 percent project contingency on all CM At Risk building construction projects. Staff is opposed to this request for a number of reasons.

First, flexibility is needed in order to respond to future needs not presently foreseeable.

Secondly, the size of a project contingency will always vary, based upon the very nature of that particular project, including such variables as site location, size, design complexity and the presence or absence of any unique program and technological requirements.

Moreover, the point at which a GMP is submitted for a project should be entirely up to the discretion of the City Council. In instances where a project is under an exceptionally tight timeline, the City may wish to have a GMP fixed amid-point, which would generally be at the end of the end of the design development phase, or even earlier at 50 percent design development. In these instances, a larger contingency will generally be necessary.

In other instances where a project has a more generous schedule, establishment of the GMP can be deferred to say the 95 percent construction document phase when the design is almost fully complete. In these situations, the contingency can be reduced to two or even one percent, as is the current practice in the City of Phoenix, Arizona, where CM At Risk is used extensively.

It should also be noted that there are several points where there has been general consensus among the workshop participants, and incorporation of the following principles into a CM At Risk implementing ordinance is recommended:

A. Construction Manager Authorized to Pre-Qualify Subcontractors and Select Through Competitive Bidding.

In order for CM At Risk to function at all, the construction manager must have the ability to pre-qualify prospective subcontractors with respect to their qualifications.

There was also agreement that bids should be submitted on an “open book” process. The construction manager would have the flexibility to select any conforming bid, and not just the low bid. This provision will not only allow selection of the most qualified and reliable subcontractor, but should also significantly enhance the City’s ability to achieve small business outreach goals as established for specific projects on a case-by-case basis.

B. Require Open Book Bids from All First-Tier Subcontractors.

There is broad consensus for this measure. This, combined with the bid selection process described above, will also prohibit bid shopping.

C. Require Listing of All First-Tier Subcontractors Performing One-And-A-Half Percent of the Work Or Greater

There is broad consensus for this measure.

SUMMARY

CM At Risk is yet another tool for the City to use when and where appropriate for construction projects. As such, it would serve to supplement the already existing Design/Build and traditional design/bid/build models already in place.

Given the number of significant projects currently in the queue for construction, including important fire, lifeguard and library system projects, coupled with the fiscal challenges facing us, it is important to have available the best tools for the management of construction projects.

Respectfully submitted,

Jon Dunchack  
Director, Special Projects

Approved: Bruce A. Herring  
Deputy City Manager