

February 14, 2003

Richard T. Crotty, County Chairman  
And  
Board of County Commissioners

Attached is a copy of an interim report of the Orange County Convention Center Phase V Construction Project. This is the second interim report we have issued on the construction project. This interim report was prepared by our consultants Cumming McGillivray L.L.C. and was limited to the review of the potential change orders.

A response to our Recommendations for Improvement was received from the Manager of the Orange County Convention Center Construction Division and is attached.

We appreciate the cooperation of the Division during the course of the audit.

Martha O. Haynie, CPA  
County Comptroller

c: Ajit M. Lalchandani, County Administrator  
Tom Ackert, Director, Orange County Convention Center  
John Morris, Manager, Orange County Convention Center, Construction  
Division  
Johnny M. Richardson, Manager, Purchasing and Contracts Division



February 14, 2003

J. Carl Smith, CPA  
Director of County Audit  
County Audit Division  
201 South Rosalind Avenue  
Orlando, Florida 32802-5775

**RE: THE POTENTIAL OF A BUDGET OVER-RUN OF THE ORANGE COUNTY  
CONVENTION CENTER CONSTRUCTION**

Dear Mr. Smith,

## **INTRODUCTION**

Cumming McGillivray L.L.C. (CMLLC) was awarded a contract by the County Comptrollers Office to work with the County's Auditing Department reviewing the Orange County Convention Center Phase V Construction. CMLLC's task, at the Comptrollers direction, was to review selected areas of the project's construction administration for adherence to contract and project processes, accounting and contract language for adequacy. CMLLC has reviewed documentation provided by the Construction Project Team consisting of the following:

- County Construction Management Team,
- Program Manager - URS Corporation
- Construction Manager - Hunt/Clark/Construct II, a Joint Venture Corporation (HCC)
- Architect / Engineer (A/E) - Helman, Hurley, Charvat, Peacock. (HHCP)

CMLLC has completed the overview of our findings from this study and have been requested by the Audit Team to issue an interim report concerning the Potential of Cost Over-Runs to the Orange County Convention Center Construction Budget prior to issuance of a final overall report. All information included within this report is based upon documentation obtained from the construction project team.

## **MONITORING AND CONTROL OVER POTENTIAL CHANGE ORDERS**

The Project Management Information System (PMIS), as set up and administered by the Construction Manager allows the County Construction Team and Program Manager to have real time tracking and forecasting of the Contract cost. The Potential Change Order (PCO) values are estimates provided by the Construction Manager for the known scope of work of the PCO's. Monitoring the CM's estimated values of the PCO's and the Change Order Requests, (COR's) logged in the PMIS system, allows it's users to gain advance warning of potential cost impacts to the project. This system, when maintained properly, helps provide

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many of the tools the County, Program Manager and Construction Manager need to manage the administration, the cost and the design as the project proceeds through construction to completion.

From the PMIS, the CM produces in its monthly report to the County, a log titled "PCO Summary Log to Owner". This report identifies only those PCO's that are considered (by the CM) to be the County's financial responsibility. It does not include those PCO's covering work that the CM intends to fund from other categories of work that are within its GMP contract. This report, in being part of the PMIS reporting system, has been approved by the County's Project Director and Program Manager. When questioned why there were gaps in the numerical system, they have stated that they are only interested in seeing the PCO's that the CM feels should be the responsibility of the owner.

Due to the CM tracking both types of changes, this report when issued, includes numerical gaps in the sequence of PCO tracking numbers. Monthly, some of the gaps are filled with previously unreported PCO's and their related values. The new cost and schedule impacts of these PCO's surface when financial resolution must be addressed due to the amount of time lapsed since being issued and the work, in most cases, already completed.

Examples of these gaps are found in comparing the 2002 monthly PCO Summary Log to the Owner with the following month's log. This comparison indicated several previously unlisted PCO's issued, some over a year old, for the first time, as potential costs to the county. Some examples of when newly visible potential project costs surfaced are as follows:

<b>PCO #</b>	<b>Date of Issuance</b>	<b>Date of Owner Visibility</b>	<b>Lapsed Time in days</b>	<b>Estimated Visibility</b>
<b>July, 2002</b>				
255.2	8-May-01	31-Jul-02	449	\$366,623
290.3	12-Jun-01	31-Jul-02	414	\$178,036
320.8	6/15/01	31-Jul-02	411	\$116,099
<b>August, 2002</b>				
252.3	8-May-01	30-Aug-02	479	\$217,321
254.8	8-May-01	30-Aug-02	479	\$ 20,069
254.9	8-May-01	30-Aug-02	479	\$170,551
851.1	5-Jun-02	30-Aug-02	86	\$ 48,823
<b>September, 2002</b>				
254.11	8-May-01	1-Oct-02	511	\$198,445
257.6	8-May-01	1-Oct-02	511	\$170,551
768.7	23-Apr-02	1-Oct-02	161	\$1,056,300
<b>October, 2002</b>				
119.3	12/29/00	1-Nov-02	672	\$ 46,359
480.1	11/6/01	1-Nov-02	360	\$ 53,060
831.1	28-May-02	1-Nov-02	157	\$129,905
<b>November, 2002</b>				
463.1	10/27/01	27-Nov-02	396	\$18,000
584.1	1/14/02	27-Nov-02	317	\$ 20,942
877.1	24-Jun-02	27-Nov-02	156	\$ 19,109

In our view it would be more beneficial to the County Construction Team to receive a monthly report that is continually updated to include all PCO's in numerical order giving adequate detail to the disposition of each. Recording potential PCO numbers (even if the amount is not known) would allow the Construction Management Team to better facilitate it's decision making.

**Recommendation**

For this and future County Projects, the PMIS system should provide the project team with a timely report showing all potential costs to the project including PCO's in numerical order with sufficient detail as to their actual and/or expected impact.

**Potential Change Order Exposure Value**

The construction budget established for the Orange County Convention Center is \$520,000,000. CMLLC has reviewed the Construction Manager's Monthly project reporting documentation through November, 2002. Through this date, the joint venture COTA Log states the project cost, including all approved change orders to the Construction Manager, is identified at approximately \$516,008,856.

The PCO Logs from the Construction Manager's Monthly report has identified the following values for the months listed during 2002.

- January           \$36,327,235
- June               \$72,069,490
- July               \$70,278,399
- August           \$67,046,833
- September       \$67,563,460
- October           \$67,196,654
- November        \$64,761,455

Per discussions with the Construction and Program Managers in what the PCO Log to the owner includes and does not include, CMLLC interprets this value to be the potential cost exposure against the Owner's remaining contingency and tax savings value of \$9,225,283. Additionally, the published PCO log does not include any value for changes and claims that are forthcoming over the remaining months of construction. It also does not include any estimated values of unresolved PCO's not listed in the November report. If this value plus the value of PCO's yet to be identified in the final months of construction are not reduced or eliminated, the construction value of this project will considerably exceed the Construction Budget.

**RECOMMENDATION**

The County's Project Director, the Program Manager and the Construction Manager should closely analyze how the project intends to mitigate all outstanding PCO's including those not listed by the Construction Manager in the PCO Summary Log to the Owner. Knowing the total exposure of these impacts will help the management team to make the necessary decisions to try and correct potential overages. For this and future County Projects, the PMIS system should show **all** potential cost changes to avoid unforeseen cost impacts late in the project.

## **POTENTIAL SCHEDULE ISSUES**

CMLLC's historical experience cautions us to the fact that in having this many Contract Changes, while each individual change may not be affecting the Critical Path Schedule and thus the Date of Substantial Completion on their own merit, they do effect the Trade Contractor's duration, labor staffing or acceleration to complete their scope of work. This in turn affects the cost of General Conditions and Overhead. To date, CMLLC has not been made aware of any requests for these types of impacts to individual Trade Contractors being submitted to the County's attention for resolution. CMLLC has found in several changes incorporated in the signed COTA's, a Proposal Qualification from the Construction Manager for each PCO which states:

"HCC may request additional compensation and/or a future time extension, which, in the future, may be justified as the result of this change order's unforeseeable cumulative effect with other change orders."

The County, by not disclaiming this reservation to claim in the agreement to the PCO and COTA settlements, allows the contractor to use this change and any other changes to submit for cumulative changes in duration or compensation for elimination of that duration from the schedule by acceleration cost. This clause also allows the contractor to submit at the end of the project for any claim for issues such as stacking of trades, loss of productivity and efficiency and various other impacts.

It is CMLLC's understanding that the County's Project Director is aware of this clause and had verbally informed the CM that there was no reason for attaching this qualification statement to the COTA's. However, the CM continues to attach these statements to resolved change orders that are incorporated into the contract without any objection from the county in writing. The Director is of the understanding that the CM contract Paragraph 16.5 requires that the timely written notice of a claim must conspicuously contain the words "Article 16 notice of Claim" or "Article 16 Notice of Potential Claim".

The CM however, apparently is under the impression that the qualification statement grants them the right to pursue cumulative effect costs or schedule impacts.

In a memo dated November 7, 2002, CMLLC asked the representative of the CM the following questions, which were answered in a memo from the CM dated November 26, 2002:

CMLLC's Question: Will HCCJV (the CM) be submitting for a cumulative effect cost or schedule change on this project:

HCCJV's Reply: While HCCJV believes that entitlement exists for a cumulative cost and schedule change, at this time it is not our intention to submit such a request. However we reserve our rights to do so.

CMLLC's Question: Will HCCJV be submitting for a schedule impact due to design changes and/or other impacts they had on this project?

HCCJV's Reply: While HCCJV believes that entitlement exist for a schedule impact due to design and/or other impacts, at this time it is not our intention to submit such a request. However we reserve our rights to do so.

CMLLC's Question: At this time, are there any schedule impacts to change orders, delays in work due to design issues or weather delays that have not been resolved with the Trade Contractors by HCC?

HCCJV's Reply: Yes, many.

CMLLC feels with the volume of changes produced within this project along with the amount of increases the Trade Contractors contracts have added due to change orders, that schedule impacts will potentially arise in the form of claims to pay for acceleration and overhead impacts.

### **RECOMMENDATION**

In order to avoid confusion and possible contract disputes over this issue, CMLLC recommended that for all future COTA settlements made by the County in this and other contracts, the County request in writing that the CM exclude any references that specifically allows potential future requests for time and compensation due to the result of cumulative effects of the resolved change order in association with other changes. Wherever possible, the County should request that specific language in the signed settlement forms state, "The agreed value of this change represents full and complete compensation for all costs associated with the cost of work including any schedule impacts and other impacts, cumulative or otherwise, associated with this change to scope of work." This language should be incorporated into the settlement agreements, wherever possible, to negate the potential impact of claims at the end of a project

The above findings were based upon documentation supplied to CMLLC by the Construction Team. CMLLC is willing to review any and all documentation once provided and discuss with the project team the logic behind our analysis as identified above.

Sincerely,

John M. Sprinkle  
Senior Estimator

c: Iain McGillivray



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February 14, 2003

TO: J. Carl Smith, Director  
County Audit Division

FROM: John Morris, Construction Manager  
OCCC Construction Division

SUBJECT: Interim Report Prepared by Cumming McGillivray dated  
January 27, 2003.

Carl, thank you for the opportunity to review and comment on the Interim Report. The efforts of your office are much appreciated. As will be noted, I concur with all three of the recommendations contained in the Interim Report. Additionally, I will provide further explanatory information which could assist your evaluation of the Project, both now and as your work progresses.

One clarification is essential to understanding the management of the construction for Phase V: The project management software is Prolog, which generates a Potential Change Order Log listing all known issues which might affect the costs of the work or the construction schedule. The PCO Log is, in fact, **only a tracking device** whose primary function is to identify all issues which might require resolution at some point in time. The assigned values **do not** portend ultimate cost impacts to the Project. That fact is well stated by the CM when, in its monthly reports, the updated PCO Log is presented with the following caveat:

Approximately \$48,200,000 of additional PCO's are identified on the PCO log. Some of the items listed on the PCO log are the responsibility of HCC within its GMP, and some will ultimately be the responsibility of the Owner for changes to the GMP. However, this amount should not be considered an indication of HCC's and/or the Owner's exposure to the various Trade Contractors for additional costs. This amount includes numerous significantly overstated quotations for changes in the work, particularly quotations for mechanical changes. This amount also includes numerous rejected quotations and conservative order of magnitude estimates for changes in the work.

Maintenance of the PCO Log, while extremely valuable to the Project Team, is not even a requirement of the contract between the County and the CM. That contract specifies that the only document which can in fact change the contract value or time is the Change Order/Transfer Authorization (COTA).

I concur with the first recommendation. We currently are able to produce a full listing of all PCO's, in numerical order, at any time, with the most current data entered into Prolog. Most of the PCO's listed in Prolog do not yet contain sufficient information as to construction time, cost, or relationship to other contractors to warrant analysis as to potential impacts. Once the CM has determined, in its view, that sufficient detail exists to estimate the cost and impact of a PCO, that item is forwarded to the PM as a potential Owner's cost. The PM may agree or disagree with the impact, and may not agree that it is an Owner's cost (a change to the Guaranteed Maximum Price).

The elapsed times on the PCO's cited in the Interim Report are the result of several factors which are normal in a project as large and complex as Phase V. The cited PCO's are break-outs of previously listed PCO's which evolved as subcontractors identified their perceived changes in work or scope to their contractor, and that contractor to the CM. It is not unusual for a contractor or subcontractor to delay submitting a request for a change order until it has completed the work and verified the costs in material and labor. There also may be normal, but lengthy, negotiations that occur between subcontractor/contractor/CM before the PCO is listed by the CM.

I concur with the second recommendation. Your staff's analysis has caused a closer review of entries onto the PCO log. I believe, however, that the current Prolog system possesses the ability to show all issues which might pose potential cost impacts to this Project. As stated above, the costs listed in the PCO log really should be regarded as "worst case," pending detailed examination and scrutiny by the CM, PM and the Owner. It also is noted that the values listed in the Interim Report for the months of January, June, July, August, September, October and November of 2002 have steadily declined as the "scrutinizing" process has progressed. The December 2002 value was down to \$58,150,241, the January 2003 value was \$56,544,712 and the value today is \$40,948,468, some 43% less than the value in June 2002. We expect this declining trend will continue. The Interim Report offers the further observation that "the published PCO log does not include any value for changes and claims that are forthcoming over the remaining months of construction." Unfortunately, we are not able to forecast what changes and claims will develop in the future, but we know there will be some. I remain confident



that the CM's and the Owner's contingencies are sufficient to fund the seen and the unforeseen. I believe that the continued hard work, skill and dedication of the entire Project Team will suffice to complete construction of the Project within the Construction Budget.

Finally, I concur in principle with the third recommendation of the Interim Report. I believe that the procedures in place in the Phase V Project satisfy the suggested purpose. Article 10 of the CM's contract specifies the time limits and circumstances under which the CM can claim additional time. To date, the CM has not claimed for additional time, and its Monthly Report for December 2002 and updated Master Schedule for January 2003 both state that the substantial completion date remains May 1, 2003. The only document that can change the CM's contract is the COTA, which is initiated by the CM, reviewed by the PM and, if approved, executed by the Owner. None of the COTA's includes any reservation of rights for additional time. A statement at the bottom of each COTA states: "Pursuant to Article 10 of the Construction Manager Agreement dated January 1, 2000 and by approval above, Owner hereby authorizes HCC to proceed with the work described above and to execute contract change orders as required with appropriate Trade Contractors for the amount stated. Owner acknowledges such change order is a cost of the project." We believe that any reservations of rights are extinguished upon execution of the COTA, unless expressly carried forward within the COTA's text.

In closing, let me emphasize that the CM, PM and Orange County are networked, with real-time access to the entire PCO Log. To my knowledge, no request has been made for a printout, which includes every entry, in numerical order. If you wish, I will be pleased to provide such a printout for your examination. Just let me know!

Again, my thanks to you and your staff for the diligence, cooperative attitude and perceptive insights during this portion of your audit. Your recommendations have been closely reviewed and will be implemented as appropriate.

JM:tg