

Internal Audit Briefing

**CAPITAL PROJECT MANAGEMENT AND CONSTRUCTION
MANAGER AT RISK CONTRACTING AUDIT REPORT**

(CIP PM & CMAR) GREG MCDOWELL / JULY 21, 2020

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Audit Purpose

At City Manager's request, evaluate:

- *Citywide project management of capital construction projects*
- *City's use of the CMAR contracting method.*

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Conclusion

The City has not consistently used best practices to manage large capital projects. Improvements should be made in the following areas:

- A. *Project Selection and Advance Planning*
- B. *Estimating*
- C. *Cost Management and Delivery*
- D. *Performance Reporting*
- E. *Use of the CMAR Project Delivery Method*

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□ Audit Scope

- Reviewed current and past practices; development of five-year CIPs
- Projects initiated as early as FY 2008; as recently as FY 2019

□ Audit Methodology

- Case study analysis
- GFOA and Project Management Institute guidance
- Engaged construction auditing firms for project-specific reviews
 - *Talson Solutions, LLC*
 - *RSM US, LLP*

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□ A. Project Selection and Advance Planning

- Project budgets have been established without sufficient design.
- Audit Recommendations
 - *Need to document/disclose capital planning decisions*
 - *Establish formal selection process for Advance Planning and Design Program (AP&DP)*
- Actions Taken/Planned
 - *Strategy & Budget will document the selection and prioritization process*
 - *The AP&DP addresses previous risks*

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□ B. Estimating

- City-wide cost estimating standards should be established.
- Audit Findings/Recommendations
 - *Need Independent Cost Estimates (ICE) prior to submittal to Council, for high dollar/high risk projects*
 - *ICE was not performed for two high-dollar projects with subcontractor bids exceeding budgets by \$15m and \$30m*
- Actions Taken/Planned
 - *For FY 2021 CIP, General Services reviewed all estimates*
 - *General Services agrees there is value in seeking ICE, as recommended*

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□ C. Cost Management and Delivery

- The City has established adequate project management controls but has not consistently documented the selection of project delivery methods.
- Audit Findings/Recommendations
 - *Establish criteria for selecting appropriate construction delivery method*
 - *The cost of staff time on capital projects has not been calculated accurately and consistently*
- Actions Taken/Planned
 - *General Services will evaluate criteria for construction delivery method selection*
 - *Strategy & Budget will work with departments to establish staff time methodology*

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□ D. Performance Reporting

- The City has historically followed a decentralized approach to accumulating capital project data.
- Audit Findings/Recommendations
 - *The City lacks systems necessary to facilitate timely project reporting*
 - *A percentage of completion reporting requirement will improve project tracking*
- Actions Taken/Planned
 - *General Services has established a new template for project reporting and is developing a monthly report to be generated using Primavera software*

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□ E. Use of Construction Manager at Risk

- The use of the CMAR Project Delivery Method was not determined to be the cause of project budgetary challenges.
- Audit Findings/Recommendations
 - *More independent evaluation of subcontractors' bids for trade packages*
 - *Allocate more City resources to projects using CMAR*
 - *Ensure the negotiation of contract terms does not delay trade package bidding*
- Actions Taken/Planned
 - *General Services will ensure that CMAR and independent cost estimators evaluate bids, and will update manuals to address CMAR recommendations*

Questions?