

AUDIT REPORT

CITY AUDITOR

Report Date:	March 10, 2021
Department:	Engineering
Subject:	Construction Manager at Risk (CMAR) Projects
Lead Auditor:	Kate Witek, Sr. Internal Auditor

OBJECTIVE

This audit was conducted to determine whether Construction Manager at Risk projects are administered in accordance with established criteria and internal controls are in place and operating effectively to monitor CMAR projects.

SCOPE & METHODOLOGY

We conducted this audit in accordance with Generally Accepted Government Auditing Standards (GAGAS), which require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The scope of the audit was CMAR projects completed after July 1, 2018. Our risk assessment concluded the audit should encompass a CMAR project from start to finish, so the scope was expanded beyond the current year. We compiled a list of all CMAR construction projects completed within our scope, and to ensure our audit testing included as much of the CMAR process as possible, we chose a large and complex project. The construction project chosen was the raw waterline from the Central Arizona Project turnout structure to the Signal Butte Water Treatment Plant. The final payment for this project was issued in August 2019.

To accomplish our objective, we:

- Evaluated department CMAR procedures to ensure compliance with applicable State (Arizona Revised Statutes, Title 34), City, and department directives.
- Interviewed staff regarding procedures, training, supervision, and monitoring controls for CMAR project delivery.
- Examined construction project records to determine if controls were in place to ensure deliverables were received, timelines were met, and supervisor approvals were documented.
- Determined compliance with the contract's Guaranteed Maximum Price (GMP) for the selected project, by testing all payments and change orders totaling \$8,355,587.43.

BACKGROUND & DISCUSSION

The City's Engineering department procures all CMAR services for the City. According to Arizona State law, ARS 34-101, CMAR is a project delivery method in which there are separate contracts for design services and construction services. The contract for construction services may be entered into the same time as the contract for design services, and the City may elect separate contracts for pre-construction and construction services.

A CMAR construction services contract requires a commitment by the construction manager to deliver the project within a GMP, based on construction and design specifications. The CMAR may act as a consultant to the City during the project design and construction phases; and may also provide the actual construction of a project. The CMAR must manage and control construction costs not to exceed the GMP, because contractually, any costs exceeding the GMP that are not approved change orders are the financial liability of the CMAR.

CONCLUSION

In our opinion, Engineering department internal controls are in place and operating effectively to monitor CMAR projects. We offer the following observation and recommendation to help strengthen program operations and meet management's objectives.

ISSUE AND RECOMMENDATION

Observation 1.1 – Contract-related document retention is not consistent.

Recommendation 1.1 – Engineering management should develop processes to ensure contract-related documents are uniformly retained.

Issue and Action Plan # 1

Issue #1: Contract-related document retention is not consistent

Observation:	Project staff did not consistently retain contract-related documents in CIPMesa, a CIPPlanner software the City uses to manage capital improvement projects.
Criteria:	<p>The Department's Contract General Conditions, Section 4.4.17, requires Project Managers to manage projects through the use of CIPMesa.</p> <p>The Engineering department payment process procedures require all appropriate signatures on payment requests and retention in CIPMesa.</p> <p>The Engineering department's Project Delivery Manual explains the project Inspector is assigned the critical responsibility of conducting field reviews to provide a timely assessment of the construction project. Information gathered during a field review is documented on a Construction Daily Report (CDR). The CDR is to be added by the Inspector to the CIPMesa Project file and routed for review and approval by the Chief Inspector.</p>
Comments:	<p>Enforcing documentation standards can ensure appropriate records retention and improve efficiency when locating key project documents. During our audit we found some instances of inconsistent and/or incorrect document retention. The following project documents were either retained in a department shared file, personal file, or in paper form; and not in CIPMesa:</p> <ul style="list-style-type: none">• CDRs are used to transmit critical information to supervisors regarding the status of field work and also provides agreement from the contractor regarding the status of the project. However, these reports were not retained in CIPMesa but were in a department shared file.• Vendor payment requests are returned to the Contract Services Specialist (CSS) with all appropriate signatures verifying the work has been completed by the contractor prior to payment. These payment requests were retained in the CSS's personal file and not in CIPMesa.

**Recommendation
and Management's
Action Plan:**

Recommendation #1-1: Engineering management should develop processes to ensure contract-related documents are consistently retained.

Action Plan #1-1: The Department recognizes the need for centralized, consistent retention practices. Currently, our project management software (CIPMesa), our SharePoint site, and the city's long term electronic document management system are our primary retention locations for all projects, regardless of project delivery method. Our Department has an active data management committee which will review the findings of the auditor, evaluate the existing systems, and develop a procedure for distribution to all Department staff. The draft procedure will be developed for distribution to and review by Department staff by April 2022. The procedure will be in final form and provided to each staff member, both new and existing, by July 2022.

Individual or Position Responsible: Marc Ahlstrom, Assistant City Engineer

Estimated Completion Date: July 2022