

**FREDERICK COUNTY, MARYLAND**  
**Frederick County Government – Capital Projects and**  
**Contract Management**  
**Frederick, Maryland**

**SUMMARY RESULTS OF THE CAPITAL IMPROVEMENT  
PROJECTS AND CONTRACT MANAGEMENT TESTING PHASE**

Final Draft for Approval by IIAAC  
9-13-2017

## TABLE OF CONTENTS

	<b>PAGE</b>
<b>BACKGROUND</b> .....	1
<b>OBJECTIVES, SCOPE, AND METHODOLOGY</b> .....	1
<b>CONCLUSIONS</b> .....	5
<b>DETAILED OBSERVATIONS AND RECOMMENDATIONS</b> .....	6
<b>Observation 1</b> .....	6
<b>Observation 2</b> .....	6
<b>Observation 3</b> .....	7
<b>Observation 4</b> .....	8
<b>Observation 5</b> .....	9
<b>Observation 6</b> .....	10
<b>Observation 7</b> .....	11

## **BACKGROUND**

CliftonLarsonAllen LLP (CLA) was engaged by Frederick County, Maryland (the County) to conduct a planning survey and risk assessment of the management of the County in relation to capital improvement projects and contract management. The planning survey and risk assessment report was issued January 6, 2017. This report represents the results of the testing phase directly related to the planning survey and risk assessment.

Annually, the County approves a capital improvements program (CIP) which lays out the plans and future projects of capital improvements and their budgeted funding. For FY 2016, the total approved CIP budget was \$142,637,415. The total 6-year approved budget was \$639,952,930. Once projects are approved, budgeted, and funded the contract process may begin. The County's Department of Procurement & Contracting (DP&C) works with the division or department seeking to contract for capital improvements purchases or projects.

Projects estimated to be in excess of \$100,000 are required to be budgeted, submitted and approved by the CIP Committee. If approved, the project is added to the capital budget. The County Executive has the final authority and can add or delete projects from the capital budget. The County Council must approve the County Executive's capital budget to provide the required funding for the current year projects.

The majority of capital improvement projects are managed by the Division of Public Works (DPW) or the Division of Utilities and Solid Waste Management (DUSWM), depending on the nature of the project. Appropriate divisions and departments are in charge of planning approved projects.

DPW or DUSWM works with DP&C to advertise the projects for bid either an Invitation for Bid (IFB) or Request for Proposal (RFP) based on the type of project and need of the County. In practice, IDQ contracts have been limited to design and project management firms. IFBs are used for the construction phase for projects. This process is designed to comply with competitive bidding regulations. Divisions or departments make awards to a contractors based on the vendors qualifications and low bid criteria set forth in the solicitation. The criteria vary between design and construction services. Various procurement methods may be utilized within a single capital project.

DPW or DUSWM are instrumental in determining the appropriate qualifications of contractors. The DP&C is responsible for ensuring appropriate internal and external regulations have been followed in the contract selection process.

## **OBJECTIVES**

Internal audit established the following overall objectives for the survey and risk assessment:

- Obtain an understanding of the controls in place in the contracting process between a division or department and the Procurement and Contracting Department.
- Assess the controls in place in the contract selection process and adherence to Federal and State compliance policies, procedures and regulations.
- Assess the controls and prequalification requirements for project and construction contracts.
- Review and evaluate the effectiveness of the contract and project planning process.
- Review and evaluate the effectiveness of managing and monitoring projects and change orders.

The planning survey and risk assessment identified potential control gaps, risks, and recommended testing. The testing performed for this report was largely based on those recommendations. After requesting information and planning the testing with members of management, procedures were slightly modified to facilitate testing. A summary of risks and testing recommendations are below:

Risk	Recommended Testing Procedure
<b>DP&amp;C could be unaware that IDQ contractors are exceeding the annual dollar threshold violating County policies in a timely manner.</b>	Select a sample of task order memorandums to verify the contractors are limited to \$750,000 per year.
<b>IDQ contracts do not take into account change orders when applying the dollar threshold, violating County policies.</b>	Review the information provided to procurement and contracting to ensure completeness and accuracy.
<b>Projects have not been adequately reviewed for reasonableness of cost and specifications.</b>	Select a sample of IDQ contracts and review change orders and verify the \$750,000 limitation is considered.
<b>Projects have not been adequately reviewed for reasonableness of cost and specifications.</b>	Select a sample of projects to verify a detailed review of cost and specifications are completed.
<b>Bids may be significantly different than budget and project estimates.</b>	Select a sample of projects and obtain internal budgets, original bids, and final project costs and determine if budgeting considers increases for economy and price factors.
<b>Change orders could be granted to a contractor without proper approval.</b>	Select a sample of change orders and determine that the approver is appropriate per County policy.
	For projects selected, note: <ul style="list-style-type: none"> <li>• Recurring issues</li> <li>• Appropriateness related to the contract</li> </ul>
<b>Change orders reported to DP&amp;C may not be accurate or adequate.</b>	Select a sample of change order reports and test for accuracy and adequacy.

## SCOPE

The scope includes capital projects from fiscal years 2014, 2015, and through March 31, 2016 procured by DUSWM and DPW. The testing did not include capital projects undertaken by other divisions or departments within the County.

## METHODOLOGY

We conducted our testing in accordance with *Generally Accepted Government Auditing Standards* (GAGAS) established by the U.S. Government Accountability Office (GAO) for performance audits.

### *Sampling Strategy*

Eighteen projects were haphazardly selected. Six projects were selected from DUSWM and 12 from DPW. The 12 projects selected from DPW included 8 from the Office of Project Management and 4 from the Office of Transportation Engineering. We did not select projects that had not advanced past the design phase.

For each project selected, related IDQ contracts and change orders were selected for testing. In many cases, all change orders were tested for a project. However, on a few projects with a significant volume of change orders, change orders were sampled.

Our sampling strategy was designed to be representative of the population and adequate to meet the objectives of this performance audit.

### *Review of Project Files*

For each project, the project files were reviewed to obtain an understanding of the project and view the documentation maintained. Generally, both DUSWM and DPW files were well organized and comprehensive. The files were easily located and individuals working with the files were knowledgeable about the contents and organization. The files were not missing any documentation needed to complete the testing.

DUSWM maintains paper files and electronic files in OnBase, the County's information management software. DPW maintains paper files. Both DUSWM and DPW have developed forms to document compliance with the County's policies and provide authorization for change orders. Additionally, project costs are tracked and compared to authorized funding.

### *Audit Procedures*

For projects sampled, (RFP) –

- We reviewed the original procurement documentation to determine project was competitively bid and selection criteria was reasonable. Additionally, we reviewed the approvals and budget setup in the accounting system.
- We obtained a comprehensive listing of change orders processed and tested the change orders to ensure –
  - Proper approvals were obtained in accordance with policy.
  - Change orders did not have a pattern (e.g. vendor preference, reoccurrence, foreseeable costs at time of bid).
  - Change orders appeared appropriate based on the contract.
  - Change order was entered into the quarterly change order report sent to DP&C and Administration.
  - If a budget adjustment was needed, proper approvals were obtained.

For projects sampled, (IDQ) –

- We reviewed the task orders to ensure information was accurate and proper approvals were obtained.
- We obtained a comprehensive listing of change orders processed and tested the change orders to ensure –
  - Proper approvals were obtained in accordance with policy.
  - Change orders did not have a pattern (e.g. vendor preference, reoccurrence, foreseeable costs at time of bid).
  - Changes orders appeared appropriate based on the contract.
  - If a budget adjustment was needed, proper approvals were obtained.

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## CONCLUSIONS

Documentation and internal controls appears to be designed to comply with County policies and procedures. A summary of our observations are as follows:

Observation	Recommendation
<b>Observation 1 – Outdated Policies for New Form of Government</b>	County update the policies and procedures to incorporate the necessary changes given the Charter form of government.
<b>Observation 2 – DP&amp;C's Role in Change Orders</b>	Contracting departments or agencies route all change orders to DP&C to be included into the contracting files. DP&C should establish a process that balances a department or agency's ability to authorize change orders that are minor to the contract but maintain an oversight when the contract needs to be amended for cost overruns.
<b>Observation 3 - Process Standardization</b>	DP&C develop a standard process (e.g. workflow, form) for the contracting departments and agencies to collect necessary information and required approvals and route to appropriate parties within the County. This process should be documented in the County's policies and procedures.
<b>Observation 4 - Long Lead Times between Notification of Change Order and Approval</b>	Review of the <i>Change Order Policy</i> (adopted August 6, 2012) to consider eliminating "time is of the essence" and develop a stronger policy that would strengthen the change order as an authorization for work to proceed. Additionally, management should consider an expected timeline and document it within the policy.
<b>Observation 5 – Capital Budgeting and Post Closing Analysis</b>	The County establish a cost threshold (e.g. 10% cost overrun/underrun) and hold a project review process with the contracting department or agency to discuss the issues causing the increase/decrease cost and document any lessons learned and changes that need to be made in the future to cost estimates, bid process, capital budgeting considerations, etc.
<b>Observation 6 – Concurring Reviews on Error and Omission Classifications</b>	We recommend establishing peer reviews on these type of judgements to ensure the County is appropriately and consistently pursuing architectural/design firms for their error and omissions.
<b>Observation 7 - Sales Tax Charged on Equipment Purchased</b>	We recommend incorporating a discussion on sales tax considerations in the policy and procedures document.

### **Observation 1 – Outdated Policies for New Form of Government**

The *Change Order Policy* (adopted August 6, 2012) has not been updated for the Charter form of government. Policies and procedures of the County should be kept current when changes are made within the organization. Without current policies, management may misunderstand the policies and procedures which increases the likelihood policies and procedures are not complied with as expected.

We recommend the County update the policies and procedures to incorporate the necessary changes given the Charter form of government.

*Risk* – Outdated written policies and procedures increase the likelihood of noncompliance with the policies and procedures.

#### **Management's Response**

Management agrees to the above noted recommendation. Currently, DP&C's Rules & Regulations have undergone revisions, and updates are in the process of review by the Office of the County Attorney. All divisions involved are in agreement and will work together to assist in formulating the proper updated Rules & Regulations. Management will strive to have this task completed within a year.

### **Observation 2 - Procurement Role in Change Orders**

DP&C is involved with the initial procurement and award of the contract. On a quarterly basis, the DP&C receives a summarized and condensed report of changes orders, costs, and budget. Procurement functions can be an effective internal control to monitor detailed change order requests. They provide an additional segregation of duty against:

- Vendors errors and omissions
- Scope expansion
- Cost control
- Vendor relations

Additionally, DP&C are responsible for administrating the County's purchasing rules to ensure compliance with the adopted policies and managing the contracting process with the vendors doing business with the County.

Currently, change orders are processed within the contracting department or agency with larger change orders (e.g. \$50,000 for construction contracts and \$25,000 for design contracts) approved by County Executive. The documentation is maintained in the project files.

We recommend the contracting departments or agencies route all change orders to DP&C to be included into the contracting files. DP&C should establish a process that balances a department or agency's ability to authorize change orders that are minor to the contract but maintain an oversight when the contract needs to be amended for cost overruns.

This process could include a provision or threshold on each contract for minor change orders and a threshold that would require DP&C direct involvement to analyze whether a contract amendment is needed.

*Risk* – Contracting departments or agencies can manage vendor relationship and contracts without checks and balances focused on public purchasing best practices resulting in additional costs, potential legal challenges, and reputation risks.

### Management's Response

In order to alleviate the need for segregation of duties and install additional checks and balances, the divisions and departments involved agree that a threshold or contingency should be put into place to allow for pre-approval of a change order.

Thresholds such as 10% of the total contract value will be analyzed and incorporated into the updated Rules & Regulations, as mentioned in observation #1, as a contingency within the financial system. At this time DP&C does not have the number of staff required to approve every change order and therefore the use of a contingency would be most cost effective. The contingency could allow for 10% overage at the sole discretion of the Division Director; however, above the 10%, DP&C will have to amend the contract to allow for additional contingencies. The divisions and departments will explore the use of a threshold or contingency over the course of the next year. Management will strive to have this included in the new Rules & Regulations within the next year.

The divisions and departments will continue to provide DP&C with detailed change order information and support whether via e-mail or the new financial records system.

### **Observation 3 - Process Standardization**

Both DPW and DUSWM have designed and implemented internal controls to comply with the *Change Order Policy* (adopted August 6, 2012). These internal controls include documentation to capture the required information on change orders and approvals. The documentation used is similar, however, standardization of this documentation could improve the flow of information between the contracting department and agency personnel and other departments and agencies within the County (e.g. Administration and DP&C).

We recommend DP&C develop a standard process (e.g. workflow, form) for the contracting departments and agencies to collect necessary information and required approvals and route to appropriate parties within the County. This process should be documented in the County's policies and procedures.

*Risk* – For policies and procedures established for County wide purposes, standardized documentation can improve compliance with policies and procedures.

### Management's Response

Management agrees that a standard process should be put into place and documented within the updated Rules & Regulations as recommended in observation #1. DP&C will work with both DPW and DUSWM to come up with an agreed upon approach and standardization. Management will strive to have this task completed within a year.

#### **Observation 4 - Long Lead Times between Notification of Change Order and Approval**

On several projects tested, a longer than expected delay existed between vendors' notification that a change order was required and obtaining the necessary approvals. Delays could be over 100 days. Per *Change Order Policy* (adopted August 6, 2012), the policy allows for paperwork to be completed after approval was received. "If time is of the essence for any reason, the checklist form may be completed after the change order is sent, with the approval of the Department Head of the Department of Engineering and Planning." It was not apparent from the documentation that time was of the essence. Additionally, the policy appears to be inconsistent granting more latitude for "time is of the essence" situations versus emergency actions for life and health/safety issues. The policy requires the supporting paperwork to be processed the next business day.

We recommend a review of the *Change Order Policy* (adopted August 6, 2012) to consider eliminating "time is of the essence" and develop a stronger policy that would strengthen the change order as an authorization for work to proceed. Additionally, management should consider an expected timeline and document it within the policy.

*Risk* – Long lead times between notification and approval can cause unnecessary delays in the projects or indicate verbal approvals are being accepted until paperwork is processed.

#### **Management's Response**

Long lead times are not necessarily caused by the County, quite often they are the fault of no one and the cause of only the project landscape and the nature of construction. Generally the creation of change orders involves a series of negotiations and questions between the agency and the vendor. These negotiations can add time to the approval process. Additionally, there are times when the County may be awaiting support and backup from the vendor in order to proceed with a change order. Therefore, the auditor was not able to test for instances where the vendor held up a change order rather than the County procedures.

With the request through observation #2, there is concern that adding a layer with DP&C could cause longer lead times, adding to the observation above. Adding to this is the fact that DP&C is not adequately staffed to provide the necessary oversight in a timely fashion. The agencies will strive to standardize procedures with the thresholds noted in the management response to observation #2 in which multiple reviews can occur at the same time in order to keep the change order moving through the approval process. The agencies will strive to ensure that change orders are moved to approval in a timely fashion and that no change order work begins before all paperwork is appropriately approved through the County Change Order Policy. However, there are occasions wherein prior authorization would negatively and severely impact the project on its critical path, making prior authorization impossible. In these rare instances, documentation of the delay in approval are noted in the change order and contractors who elect to proceed without a properly executed change order are aware they do so at their own risk.

Management agrees that the change order policy needs to be updated and will strive to have an updated policy within a year. The update to the policy will address lead times and the "time is of the essence" clause.

### **Observation 5 – Capital Budgeting and Post Closing Analysis**

During the capital budgeting process, projects are submitted and scheduled within the capital projects budget document. For various reasons, the amounts budgeted and actual procurement costs can have significant variances. These reasons can be related to change in scope, inaccurate cost estimates, or unforeseen design issues. It can be difficult to adequately estimate the projects scope and costs without establishing a process to improve the quality of bid documents. Additionally, the County should be involved in carrying out “post construction” reviews to understand problem areas and help maintain institutional learning and tracking with vendors and budget estimates. The *Change Order Policy* (adopted August 6, 2012) Section XI has recognized this need and has outlined a process. This process is not consistently undertaken and the education is not distributed effectively.

We recommend the County establish a cost threshold (e.g. 10% cost overrun/underrun) and hold a project review process with the contracting department or agency to discuss the issues causing the increase/decrease cost and document any lessons learned and changes that need to be made in the future to cost estimates, bid process, capital budgeting considerations, etc.

*Risk* – The County may overlook opportunities to improve business processes and get better at project management and understanding the factors which increase the cost of the project.

#### **Management's Response**

Management agrees that a post construction review process would be beneficial to the capital project process, especially in establishing the budgets for future capital projects that may be of similar size, scope and complexity. For efficiency and effectiveness of the review, the divisions and departments will work with the Budget Office to establish a review cost threshold by project. Management agrees that these reviews could help alleviate over and under budgeting of future projects by learning from past discrepancies especially where projects are frequent in nature. With or without a threshold set, a lessons-learned approach should be performed to provide opportunity to educate all divisions and departments involved in a project and assist with turnover of personnel while learning and developing an understanding of the budget approach.

Management will address the review process in the newly updated Rules & Regulations within a year.

## **Observation 6 – Concurring Reviews on Error and Omission Classifications**

Changes orders are classified by cause. A change order is broadly classified as an unforeseen circumstance or an error or omission. If the change order is classified as an error or omission, the contracting department or agency is requested to determine what type of error or omission. There are three types:

1. *Type 1* – Requires additional funds to be expended to correct or remedy the error or omission that would not have been expended if the designs were accurate. The County would pursue recovery of damages from the architectural/design firm.
2. *Type 2* – Requires additional funds to be expended to properly complete the project, however, the funds would have been required if the designs were accurate. If appropriate, the County would pursue recovery of costs associated with additional time and consulting services to resolve the design issues from the architectural/design firm.
3. *Type 3* – Requires additional funds to be expended to properly complete the project, however, the funds would have been required if the designs were accurate. The recovery of costs were determined to be unnecessary.

These judgements are subjective and Type 1 and Type 2 errors and omissions involve contractual and legal considerations.

We recommend establishing peer reviews on these type of judgements to ensure the County is appropriately and consistently pursuing architectural/design firms for their error and omissions.

*Risk* – The County’s contracting departments and agencies treat architectural/design firms differently resulting in potential contractual and legal issues. Additionally, the County’s reputation with business community could be negatively impacted.

### **Management’s Response**

Management agrees that concurring reviews are valuable both in learning for future projects and as a check/balance process. Both DPW and DUSWM have internal review processes that include the project manager, office chief, department head and director; and both agencies utilized the Consultant Responsibility Board (CRB) to determine if the recoupment of an error/omission cost is appropriate. The CRB consist of individuals from DPW, DUSWM, Permitting and Planning, the County Chief Administrative Officer (CAO), and the director of DP&C and is utilized when there is a large scale error/omission issue. Management agrees to review the change orders being referred to the CRB to determine if a greater number of them or established threshold of them should be reviewed or discussed by CRB and will incorporate the findings in the new Rules and Regulations.

### **Observation 7 - Sales Tax Charged on Equipment Purchased**

On one project tested, a change order was processed to add playground equipment to a project. The vendor charged sales tax of \$8,178 and added an additional 15% profit margin to the cost for a total of \$9,404. Under Maryland tax regulations, certain government procurements are exempt from sales and use tax. Management at the DPW knows certain procurements made directly with the County are exempt from sales and use tax. Because the playground equipment is tangible personal property and does not qualify as real property, the purchase could have been exempt from sales and use tax to both the contractor and the County (COMAR Title 03, Subtitle 06).

We recommend incorporating a discussion on sales and use tax considerations in the policy and procedures document. Additionally, we recommend including a clause within the vendor contracts to consider Maryland's sales and tax regulations when developing charges to the County with the objective to minimize costs to the County.

*Risk – Purchasing tangible personal property with contractors may increase project costs to the County that could be avoided.*

#### **Management's Response**

Management agrees that the County should take advantage whenever possible of their tax exempt status. Considerations will be made by DP&C to place a blanket statement in capital improvements contracts for contractors/vendors to allow the County the opportunity to minimize costs by utilizing its tax exempt status where feasible. The consideration will be made on a case by case basis to ensure that the County has appropriate storage space, coordination with the contractor/vendor and that project delays do not ensue.