

Design and Construction Financial Audit

Objectives

The objectives of the audit were to determine the following:

- Comprehensive policies for construction management have been established;
- Effective system of controls is in place to assist in managing construction-related costs;
- Payments are made in accordance with contractual limitations or maximums;
- Effective system of controls is in place to prevent duplicate vendor payments throughout all phases of each project;
- Changes from the initial contract award and the final contract price are appropriately negotiated and documented;
- Controls over change orders are appropriate and adequately documented;
- Project close-outs (punch lists, certificates of occupancy and warranties) are conducted appropriately and documented;
- Information systems are reliable, timely and a source of accurate information for school management and the Board;

Scope

Documented financial controls throughout the design and construction process, from time of project approval and designation of funding sources, through vendor selection, procurement, payment and project close-out.

Outlined the APS Control Environment on Major Construction Projects in five distinct areas:

1. Project cost controls;
2. Purchase order (PO) processing controls;
3. Invoice and payment processing controls;
4. Ongoing oversight and communications controls;
5. Change order processing controls.

Developed understanding of the current APS design and construction environment, including procedures, practices, methods and coordination with internal stakeholders.

Identified how issues are identified, communicated and resolved within each area of responsibility and among all areas.

Interviewed management and selected staff members within Design and Construction, Finance and Purchasing for both process details and overall perspective.

Reviewed selected minutes from bi-weekly Design and Construction meetings and monthly Capital Coordinating Committee meetings.

Accessed relevant APS financial systems that track budgets, purchase requisitions, purchase orders, receipts of goods and services, payments.

Reviewed systems used within Design and Construction to plan, manage, control and monitor new and ongoing projects.

Selected a total of ten vendors for six projects. These included vendors in the areas of Architect & Engineering, Design Services, Construction Management, and General Contractor. For each of the vendors selected on a project, reviewed support for all payments made from project inception through date of audit review as of May 2016.

Vendor Payment Review

Confirmed the effectiveness of the APS systems that require the following:

- Issuance of purchase orders for all major capital expenditures;
- **Funding by sources as specified in all approved purchase orders;**
- Invoice alignment with purchase order detailed lines;
- **Payment requests supported by internal reviews:** initial review by Project Manager, review by Administrative Specialist for purchase order alignment, review by Design and Construction management;
- Final review by Financial Analyst for **adherence to approved APS project budgets** and coordination with funded purchase orders.

For each vendor selected on a project, performed the following procedures:

- Reviewed proof of standard purchase order issued including change orders;
- Reviewed all invoices processed, receipts and payments, as each invoice and payment could include multiple receipts, or portions of receipts;
- Traced invoices to both payments and to receipts that confirmed work was performed;
- Confirmed that all items paid had been purchased under an APS standard purchase order;
- Confirmed that all payments were supported by receipts for at least the amount of the payment.

Details of items reviewed for ten vendors for six projects.

Discovery: VMDO Architects (A/E Professional Services)

- Reviewed standard purchase order including 26 change orders (\$3.8 million);
- Reviewed all invoices, receipts and payment financial information for the period of November 2012 through June 2016;
- Traced 43 Invoices to 40 payments to 62 receipts (\$3.7 million) that confirmed work was performed through June 2016. Reviewed 6 invoices paid from July 2016 through December 2016 (\$.1 million) for total of \$3.8 million paid to date.

In addition, confirmed accuracy of contract, change orders, purchase order, invoice and payments on Excel schedule maintained by the Administrative Specialist.

Discovery: Heery International (Construction Management Services)

- Reviewed standard purchase order including 11 change orders (\$2 million).
- Reviewed all invoices, receipts and payment financial information for the period of March 2013 through May 2016;
- Traced 38 Invoices to 35 payments to 39 receipts (\$2 million) that confirmed work was performed.

Discovery: Sigal Construction (General Contractor)

- Reviewed standard purchase order including 5 change orders (\$31.3 million);
- Reviewed all invoices, receipts and payment financial information for the period of March 2015 through June 2016;
- Traced 24 Invoices to 25 payments to 30 receipts (\$31.3 million) that confirmed work performed and paid per April 29, 2016 Application and Certificate for Payment.

In addition, confirmed accuracy of contract, change orders, purchase order, invoice and payments on Excel schedule maintained by the Administrative Specialist.

Discovery: Kimball Construction (Supplemental Services)

- Reviewed 6 standard purchase orders (\$.37 million);
- Reviewed all invoice, receipts and payment financial information for the period of September 2015 through July 2016;
- Traced 6 Invoices to 5 payments to 10 receipts that confirmed work was performed through July 2016. No additional payments as of February 2017.

Wilson: Leo A Daly (Design Services)

- Reviewed standard purchase order including 8 change orders (\$3.5 million);
- Reviewed all invoice, receipts and payment financial information for the period of January 2015 through June 2016;
- Traced 13 Invoices to 12 payments to 19 receipts (\$2.4 million) that confirmed work performed through June 2016. Reviewed 3 invoices paid from July 2016 through November 2016 (\$1.1 million) for total of \$3.5 million paid to date.

Stratford: Quinn Evans Architects (Design Services)

- Reviewed standard purchase order including 5 change orders (\$2 million);
- Reviewed all invoice, receipts and payment financial information for the period of November 2014 through June 2016;
- Traced 15 Invoices to 14 payments to 19 receipts that confirmed work was performed through June 2016. Reviewed 6 invoices paid from July 2016 through January 2017 for total of \$1.9 million paid to date. As of February 2017, \$.1 million remaining had not been invoiced.

Ashlawn: Grunley Construction (General Contractor)

- Reviewed standard purchase order including 5 change orders (\$16.2 million);
- Reviewed all invoice, receipts and payment financial information for the period of March 2014 through February 2016;
- Traced 18 Invoices to 18 payments to 21 receipts (\$16.2 million) that confirmed work performed and paid per December 31, 2015 Application and Certificate for Payment.

Ashlawn: J Vinton Schafer (Construction Management Services)

- Reviewed standard purchase order including 3 change orders (\$.9 million);
- Reviewed all invoice, receipts and payment financial information for the period of March 2013 through November 2015;
- Traced 33 Invoices to 31 payments to 35 receipts (\$.9 million) that confirmed work was performed.

McKinley: Grunley Construction (General Contractor)

- Reviewed standard purchase order including 1 change orders (\$8.9 million);
- Reviewed invoice, receipts and payment financial information for the period of October 2015 through April 2016;

- Traced 9 Invoices to 8 payments to 12 receipts (\$6.7 million) that confirmed work was performed through April 2016. Reviewed 3 invoices paid from May 2016 through August 2016 (\$2.2 million) for total of \$8.9 million paid to date.

Yorktown: HESS (General Contractor)

- Reviewed standard purchase order including 16 change orders (\$69.8 million);
- Reviewed invoice, receipt and payment financial information by aggregate totals for the period of April 2009 through June 2016;
- Confirmed that total completed and total earned less retainage (\$69.7 million) per December 31, 2015 Application and Certificate for Payment agreed with total amounts invoiced, received and paid through June 2016. No additional payments as of February 2017.

Findings and Recommendations

APS has an effective system of controls within Design and Construction, Purchasing and Finance in place that assist in managing construction-related costs. Payments are made in accordance with contractual limitations or maximums. Changes from the initial contract award and the final contract price are appropriately negotiated and documented.

Design and Construction follows the Board approved sequence and responsibilities for activities associated with the design and construction of each school construction or renewal project. The areas of setting parameters, schematic design, design development, construction document preparation, project approvals and construction follow the approved protocol.

The rate of new projects has increased over the past few years, while resources for financial control oversight have remained constant. With the increase of planned new projects and recurrent issues affecting ongoing projects, it is important to continue to perform all control functions that have facilitated the timely identification of financial budget issues. This pro-active approach has been effective at ensuring the Board is kept informed of all major financial changes to a project.

Attached are the Findings including Management Responses for each of these 5 findings.

1 Post Occupancy Follow-up of Non-financial items

Design and Construction management noted that the area of project post occupancy follow-up of non-financial items has remained open due to issues with contractor performance with the timely resolution of close-out items. Post Occupancy steps that need to be implemented include:

- 90-day debriefing of Building Level Planning Committee;
- 1-year post occupancy evaluation;
- Formal transfer of extended maintenance contracts & extended warranties to Operations and Maintenance

2 Financial Control Resources

The Financial Analyst currently performs or participates in ten critical planning and control functions throughout the life of each APS project.

- Suggest cross-training additional Finance staff in each of these functions to provide back-up when needed and to facilitate continuity in the absence of the incumbent Financial Analyst.
- Suggest the assignment of a junior staff person to fulfill necessary clerical responsibilities associated with the key control functions.

3 Financial Control Documentation

Suggest all current Financial Analyst functions, including the ten critical planning and control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these control functions.

4 Design & Construction Control Documentation

Design and Construction Project Managers, Administrative Specialist and management perform fifteen planning and control functions throughout the life of each APS project.

Suggest that all current Design and Construction functions, including the fifteen critical planning and control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these responsibilities

5 Purchasing Control Documentation

Purchasing management and staff perform seven critical planning and control functions throughout the life of each APS project.

Suggest that all current Purchasing functions, including the seven critical planning and control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these responsibilities.

Management Response

The Audit Reports section of *APS Internal Audit Policy* notes:

“The (management) response should include target dates for all actions required to correct findings and material weaknesses, and responses and target dates for general audit recommendations.”

At their meeting on May 22, 2016 the Audit Committee provided guidelines for management responses to audit reports.

It was suggested that each response include the following:

- Who is responsible each action?
- What is the action taken?
- When will each action be implemented and/or completed?
- Additional resources required to complete each action.
- Training requirements,

The attached/enclosed documents are being forwarded to the Office of Internal Audit on a confidential basis, and are exempt from disclosure under Va. Code 2.2-3705.3(7)(vi) of the Virginia Freedom of Information Act. Disclosure may also be prohibited by other provisions of law.

Outline of APS Financial Controls on Major Construction Projects

1. Project cost controls:

- Project Manager develops and maintains a project budget Excel spreadsheet which details construction costs (general contractor) soft costs (design fees, project management, general requirements, equipment) and project funding sources.
- Financial Analyst reviews and critically evaluates proposed project budgets for reasonableness, completeness and accuracy. Validates that estimates for future expenses align with past history, for example, the cost to move furniture and supplies from and to a school during construction.
- Project Manager and Financial Analyst meet each month to reconcile Project Manager financial information maintained per Oracle Contract Manager with Financial Analyst schedules of approved purchase orders and actual payments made. Collaborative approach keeps lines of communications open.
- Financial Analyst summarizes known financial information and projects possible impacts to budgets, based on known or probable events.
- Financial Analyst estimates impact of current cost overages on total project budget. Recommends increase in total project budget for Board approval when it is evident there will be overruns. This occurs prior to using all project funds.
- Financial Analyst may delay payment to a vendor if it appears total budget will be exceeded and an increased budget has not yet been requested. This appears to be an important control that helps align paid items with the approved budget.

2. Purchase order (PO) processing controls:

- Project Manager completes purchase order requisition and electronically forwards through approval chain in 3 Departments:
 - Design & Construction:
 - Acting Director of Design & Construction,
Assistant Superintendent;
 - Finance:
 - Financial Analyst;
 - Purchasing:
 - Assistant Purchasing Director,
 - Purchasing Director, for all items over \$500,000.00, for final approval.

- PO must specify funding sources of all payments, including the following:
 1. Bond proceeds;
 2. Capital Reserves;
 3. Operations;
 4. Minor Construction / Major Maintenance;
 5. Joint funds with County.

- PO is issued for only a portion of total approved vendor budget so that only funds actually needed for the current period are encumbered. This allows APS to maintain compliance with total outstanding bond debt limit.

- Administrative Specialist creates an Excel billing sheet for each purchase order that lists vendor, school, project manager, account and amount approved. This allows the Administrative Specialist to track amount paid on each purchase order and alert each project manager when additional funds need to be encumbered for planned project expenses.

3. Invoice and payment processing controls:

- Administrative Specialist reviews all invoices received for corresponding purchase order and available funds.
- Project Manager and the Director of Design & Construction review and approve each invoice.
- Financial Analyst reviews and approves invoices submitted each week for general ledger account accuracy and proof of budgeted funds in the accounts charged.
- Accounts Payable processes each approved invoice for payment.
- Administrative Specialist updates Oracle Contract Manager with invoice payment information so this is available to all approved parties to the project.
- Prior to approval of final project payment, the Financial Analyst re-calculates all prior payments made to date.

4. Ongoing oversight and communications controls:

Scheduled and ongoing communication among the Project Manager, Administrative Specialist, Assistant Director, Purchasing and Financial Analyst facilitate transparency in both current and planned financial transactions. This collaborative approach to interactions among Design & Construction, Purchasing and Finance staff is key to the timely recognition of issues that may impact the approved project budget.

- Assistant Director, Purchasing and Financial Analyst attend the bi-weekly Design & Construction staff meetings to stay abreast of emerging issues. In addition, the Director, Purchasing and Financial Analyst both attend the monthly Capital Coordinating Committee (CCC) meetings with Finance, Design & Construction and Superintendent.
- Financial Analyst and Assistant Director, Purchasing meet regularly to discuss planned PO requests and how these should be structured to maintain control over budgeted funds.
- Financial Analyst schedules field visits when available to meet with contractor. This provides access to project issues and delays that may impact components of project cost. As projects load increases each year, the ability of the Financial Analyst to attend as many onsite meetings is impacted.
- Design and Construction meets with APS Maintenance and Plant Operations to discuss new project components that affect the future efficiency and cost effectiveness of future operations.

5. Change order processing controls:

- School Board approval is needed for all change requests in excess of \$100,000.
- Current change control process details required communications among Contractor, Architect, Construction Manager, Project Manager and Director (APS Design and Construction) and Financial Analyst (APS Finance). Process allow all to be kept informed of potential over-budget items prior to project close-out.
- After completion by the Project Manager, change order with documentation is forwarded through approval chain in 3 Departments:
 - Design & Construction:
 - Acting Director of Design & Construction, Assistant Superintendent;
 - Finance:
 - Financial Analyst;
 - Purchasing:
 - Assistant Purchasing Director,
 - Purchasing Director, for all items over \$500,000.00, for final approval.
- Similar to purchase order controls, Administrative Specialist updates applicable Excel billing sheet with approved change order information and adds the approved change order to Oracle Contract Manager.

Arlington Public Schools – Design & Construction

Record of Audit Finding # 1 – Post Occupancy

Finding:

Design and Construction management noted that project post occupancy follow-up of non-financial items has remained open for due to issues with contractor performance with the timely resolution of close-out items.

Criteria:

Design and Construction follows the Board approved sequence and responsibilities for activities associated with the design and construction of each school construction or renewal project. The Board reviews and approves projects at three stages of design: concept options, schematic design and final design.

The Board receives periodic written reports on the physical and fiscal progress of all projects funded in the Capital plan. In addition, close out evaluation reports on each major construction project are required to be presented to the School Board. The evaluation report contains fiscal, timeliness of completion, and building user information.

Cause:

Contractor performance with the timely completion and resolution of punch list items.

Effect:

Project closure delay impacts the formal transfer of maintenance contracts and extended warranties to Operations and Maintenance.

Recommendation:

Post Occupancy steps that need to be consistently implemented include:

- 90 day debriefing of Building Level Planning Committee;
- 1 year post occupancy evaluation report to the School Board;
- Formal transfer of extended maintenance contracts & extended warranties to Operation and Maintenance.

Management Response:

Date: Sept. 28, 2016 and Jan. 10, 2017 (update)

Office: Design and Construction Services

Staff: Jeffrey D. Chambers, Director, Design & Construction
John C. Chadwick, Assistant Superintendent, Facilities & Operations

90 day debriefing of Building Level Planning Committee (BLPC);

- Responsible party – Architect, as required by the standard scope of services Contract
- Action taken – schedule debriefing meeting and building tour with the BLPC in accordance with PIP 50-1.3
- Date of completion/implementation – approximately 90 days after occupancy of the last project phase
- Additional resources required – none
- Additional training required – none

1 year post occupancy evaluation report to the School Board;

- Responsible party – Architect, as required by the standard scope of services Contract.
- Action taken – Review the as-built scope of the project incorporating any changes made to the original design scope through construction. Create a report for D&C and provide presentation to the School Board as appropriate.
- Date of completion/implementation – report and presentation prepared approximately one year after occupancy of the last project phase.
- Additional resources required – none
- Additional training required – none

Formal transfer of extended maintenance contracts & extended warranties to Operation and Maintenance.

- Responsible party – Design and Construction Project Manager (D&C PM)
- Action taken – at substantial completion for the building or phase the D&C PM shall schedule formal turnover meeting with Maintenance and Plant Operations Directors. At that meeting all warranty, as-built, Operations &

Maintenance (O&M) documentation will be transferred. If appropriate for phase turnover, a keyed plan illustrating the portion of the work to be turned over will be provided.

- Date of completion/implementation – at substantial completion
- Additional resources required – input from Program Manager to assist in developing process documentation/improvement
- Additional training required – none

Arlington Public Schools – Design & Construction

Record of Audit Finding # 2 – Financial Control Resources

Finding:

The rate of new projects has increased over the past few years. At the same time, issues encountered with existing projects have caused many projects to remain open. Resources for financial control oversight have remained constant throughout this project growth.

Criteria:

Scheduled and ongoing communication among the Project Manager, Administrative Specialist, Assistant Director, Purchasing and Financial Analyst facilitate transparency in both current and planned financial transactions. This collaborative approach to interactions among Design & Construction, Purchasing and Finance staff is key to the timely recognition of issues that may impact the approved project budget.

Financial Analyst currently performs or participates in ten critical planning and control functions throughout the life of each APS project:

1. **Evaluates Project Managers' proposed project budgets** for reasonableness, completeness and accuracy.
2. **Reviews Project Managers' memos to School Board** for approval of adopted project budgets and other memos related to financial changes in the projects.
3. **Coordinates and loads all approved project budgets funding** into the Oracle financial system.
4. **Coordinates with Purchasing on all planned construction purchase order requests** and how these should be structured to maintain control over budgeted project funds.
5. **Reviews invoices submitted each week** for general ledger account accuracy and proof of budgeted funds.
6. **Attends project construction meetings** with Project Managers, General Contractors, and consultant Project Construction Managers to review potential change orders, makes recommendations to reduce costs to offset increases, and review other issues that may impact the budget.

7. **Coordinates the monthly Capital Coordinating Committee (CCC)** meetings and attends bi-weekly Design & Construction staff meetings to stay abreast of emerging issues.
8. **Meets with Project Managers each month** to reconcile Oracle financial system information with approved purchase orders and actual payments.
9. **Re-calculates all major vendors prior payments made** to ensure payments match contract amounts.
10. **Delays or rejects approval of requisitions if it appears the total budget will be exceeded** and, if necessary and warranted, works with the Project Manager to request additional funding from the School Board.

Cause:

The planned increase in new projects may impact the ability of the Financial Analyst to fulfill all requirements in the most effective ways. For example, the ability to attend all current plus additional contractor and project manager meetings could diminish understanding of issues that may affect project cost. Also, the ability to review all potential change order logs could impact efforts to proactively anticipate new cost requirements.

Effect:

With the increase of planned new projects and recurrent issues affecting ongoing projects, it is important to continue to perform all control functions that have facilitated the timely identification of financial budget issues. This pro-active approach has been effective at ensuring the Board is kept informed of all major financial changes to a project.

Recommendation:

Suggest cross-training additional Finance staff in each of these functions to provide back-up when needed and to facilitate continuity in the absence of the incumbent Financial Analyst.

Suggest the assignment of a junior staff person to fulfill necessary clerical responsibilities associated with the key control functions. This could include scanning of checks with supporting documents, preparation of journal entries for the payment of county permits and routine financial system queries to confirm vendor payments, under the supervision of the Financial Analyst.

Management Response:

Date: Jan. 9, 2017

Office: Finance & Management Services

Staff: Leslie J. Peterson, Assistant Superintendent for Finance & Management Services

Recommendation #1 - Suggest cross-training additional Finance staff in each of these functions to provide back-up when needed and to facilitate continuity in the absence of the incumbent Financial Analyst.

We agree that cross-training additional Finance staff in each of the functions performed by the Capital Projects Financial Analyst is necessary. At present, all current Finance staff are overloaded with their current volume of work. We are in the process of hiring a new Financial Analyst I position that will help to ease the burden on the current financial analysts and anticipate that the new person would start after the start of 2017. After the new analyst is hired and has had sufficient training time on the duties they will assume, some of the current volume of work will then be transferred to that position and cross-training of other financial analysts can begin. We anticipate Mike Freda will begin cross-training in the May-June timeframe with completion around the end of the calendar year.

Recommendation #2 - Suggest the assignment of a junior staff person to fulfill necessary clerical responsibilities associated with the key control functions. This could include scanning of checks with supporting documents, preparation of journal entries for the payment of county permits and routine financial system queries to confirm vendor payments, under the supervision of the Financial Analyst.

Currently, there are no junior staff persons in the Finance area – all analysts are Financial Analyst III positions. We are in the process of hiring a new Financial Analyst I position that could possibly take on some of the clerical responsibilities noted above. It is possible that not all of the clerical responsibilities could be transferred to this position as this position will also be taking on responsibilities from other analysts who are somewhat more overburdened at this time. We anticipate this position to be hired and in place after the start of 2017 so some of these duties could possibly be transferred shortly thereafter. Should the new position not be able to assume some of the clerical responsibilities, we would need to request additional staffing.

Arlington Public Schools – Design & Construction

Record of Audit Finding # 3 – Financial Control Documentation

Finding:

Financial Analyst performs or participates in ten critical control functions that help to ensure that project funds are appropriately budgeted, purchase orders identify budgeted fund sources, vendor payments match contract amounts, change orders are pro-actively tracked and overall project financial information is accurately communicated to the Board.

These financial control functions need to be documented in a process manual. This will allow for performance of these functions in the absence of the incumbent Financial Analyst.

Criteria:

Scheduled and ongoing communication among the Project Manager, Administrative Specialist, Assistant Director, Purchasing and Financial Analyst facilitate transparency in both current and planned financial transactions. This collaborative approach to interactions among Design & Construction, Purchasing and Finance staff is key to the timely recognition of issues that may impact the approved project budget.

Financial Analyst currently performs or participates in ten critical planning and control functions throughout the life of each APS project:

1. **Evaluates Project Managers' proposed project budgets** for reasonableness, completeness and accuracy.
2. **Reviews Project Managers' memos to School Board** for approval of adopted project budgets and other memos related to financial changes in the projects.
3. **Coordinates and loads all approved project budgets funding** into the Oracle financial system.
4. **Coordinates with Purchasing on all planned construction purchase order requests** and how these should be structured to maintain control over budgeted project funds.
5. **Reviews invoices submitted each week** for general ledger account accuracy and proof of budgeted funds.

6. **Attends project construction meetings** with Project Managers, General Contractors, and consultant Project Construction Managers to review potential change orders, makes recommendations to reduce costs to offset increases, and review other issues that may impact the budget.
7. **Coordinates the monthly Capital Coordinating Committee (CCC)** meetings and attends bi-weekly Design & Construction staff meetings to stay abreast of emerging issues.
8. **Meets with Project Managers each month** to reconcile Oracle financial system information with approved purchase orders and actual payments.
9. **Re-calculates all major vendors prior payments made** to ensure payments match the approved contract amount.
10. **Delays or rejects approval of requisitions if it appears the total budget will be exceeded** and, if necessary and warranted, works with the Project Manager to request additional funding from the School Board.

Cause:

As these current functions all are performed by the incumbent who has the background, skills and expertise to meet all these requirements, written process documentation has not been established as a priority.

Effect:

With the planned increase of new projects and recurrent issues affecting ongoing projects, it is important to have a documented financial control system to allow Finance to continue to perform all control functions that have facilitated the timely identification of financial budget issues. This pro-active approach has been effective at ensuring the Board is kept informed of all project finances and major changes.

Recommendation:

Suggest all current Financial Analyst functions, including the ten critical planning and control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these control functions.

Management Response:**Date:** Jan. 9, 2017**Office:** Finance & Management Services**Staff:** Leslie J. Peterson, Assistant Superintendent for Finance & Management Services

The Finance department was granted an additional analyst position in the FY 2017 budget. We are in the process of hiring for this new position and hope to have the position filled shortly after the start of 2017. As part of the hiring process, the Finance department is undergoing a reorganization of responsibilities. Once the reorganization is complete, estimated to be March-April 2017, the Oracle Functional Analyst will work with each Financial Analyst to determine a plan of action for creating and composing a written process manual outlining all of their current functions, including the ten critical planning and control functions. Our goal would be to have the written process manual complete by December 2017.

Arlington Public Schools – Design & Construction

Record of Audit Finding # 4 – Control Documentation

Finding:

Design and Construction management and staff perform or participate in seventeen critical control functions that help to ensure that project funds are appropriately budgeted, purchase orders identify budgeted fund sources, vendor payments match contract amounts, change orders are pro-actively tracked and overall project financial information is accurately communicated to the Board.

These financial control functions need to be documented in a process manual. This will allow for performance of these functions during any absence of any existing staff.

Criteria:

Scheduled and ongoing communication among the Project Manager, Account Specialist, Assistant Director, Purchasing and Financial Analyst facilitate transparency in both current and planned financial transactions. This collaborative approach to interactions among Design & Construction, Purchasing and Finance staff is key to the timely recognition of issues that may impact the approved project budget.

Project Manager currently performs or participates in six critical planning and control functions throughout the life of each APS project:

1. **Prepares detailed project budgets** that are reviewed with Finance for reasonableness, completeness and accuracy.
2. **Prepares memos on total project budgets and changes to approved project budgets for School Board approval** that are reviewed with Finance.
3. **Attends project meetings** with Finance, Design Team, General Contractors, and consultant Project Construction Managers to review potential change orders, makes recommendations to reduce costs to offset increases, and review other issues that may impact the budget.
4. **Attends bi-weekly Design & Construction staff meetings** to stay abreast of emerging issues.
5. **Meets with Finance each month** to reconcile Oracle financial system information with approved purchase orders and actual payments.

6. **If it appears the total budget will be exceeded**, works with Finance to request additional funding from the School Board.

Account Specialist currently performs or participates in six payment control functions throughout the life of each APS construction project:

1. **Reviews Invoices** for corresponding purchase order and available funds.
2. Creates Excel billing sheet for each project vendor that **tracks total paid invoices to approved amounts of each purchase order** and change order.
3. **Forwards original invoices each week with list for review by the Financial Analyst** for budgeted fund and account accuracy.
4. **Maintains file of unpaid invoices** that require Project Manager action.
5. **Creates approval memo for AIA Change Orders** for initial review by Project Manager and approval by Director of Design and Construction, Financial Analyst and final approval by Director of Purchasing.
6. Enters each approved purchase order, payment and change order to **Oracle Contract Manager for access by all approved stakeholders**.

In addition to oversight of the control tasks performed by the Project Managers and Account Specialist, Design & Construction management performs five additional planning and control functions throughout the life of each APS project:

1. **Communicate emerging issues** at the monthly Capital Coordinating Committee (CCC) meetings with the Superintendent. Finance and Purchasing.
2. **Coordinates with Purchasing on Construction Manager at Risk/General Contractor selection**. Multi-stage process includes selection committee, Request for Qualifications, Request for Proposal from approved vendors, interviews, bid solicitation, fee negotiation, School Board (SB) recommendation and SB approval.
3. **Coordinates with Purchasing on vendor selection** for guidance on compliance with VA regulations.

4. **Reviews and approves all invoices** after initial review by Project Manager and prior to review and approval by Financial Analyst.
5. **Reviews and approves all AIA Change Orders** after initial review by Project Manager and prior to approval by Financial Analyst and Director of Purchasing.

Cause:

As these current functions all are performed by the incumbents who have the background, skills and expertise to meet all these requirements, written process documentation has not been established as a priority.

Effect:

With the planned increase of new projects and recurrent issues affecting ongoing projects, it is important to have a documented financial control system to allow Design and Construction to continue to perform all control functions that have facilitated the timely identification of financial budget issues. This pro-active approach has been effective at ensuring the Board is kept informed of all project finances and major changes.

Recommendation:

Suggest all current Design and Construction functions, including these seventeen critical planning and control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these control functions.

Management Response:

Date: Sept. 28, 2016 and Jan. 10, 2017 (update)

Office: Design and Construction Services

Staff: Jeffrey D. Chambers, Director, Design & Construction
John C. Chadwick, Assistant Superintendent, Facilities & Operations

- Responsible party – Director, Design & Construction / Program Manager
- Action taken – Project Management team, Account Specialist, and Director / Assistant Director shall prepare written documentation on how the listed processes are undertaken. Under the Director of Design and Construction’s direction, information shall be compiled into a “how-to” manual to be utilized by future employees who may be assigned these tasks. These activities must be coordinated with any Facilities & Operations policy and PIP revisions.
- Date of completion/implementation – no later than end of December 2017
- Since the Audit, the Administrative Specialist position has been replaced with an Account Specialist responsible to focus on financial controls for the projects. In order to create redundancy, the new Design and Construction Account Specialist shall be cross trained with the Maintenance and Operations Account Specialist.

Arlington Public Schools – Design & Construction

Record of Audit Finding # 5 – Purchasing Control Documentation

Finding:

Purchasing management and staff perform or participate in seven critical control functions that help to ensure that construction project vendor selection, bid process and funding encumbrances align with APS policies and State of Virginia laws.

These procurement control functions need to be documented in a process manual. This will allow for performance of these functions during any absence of any existing staff.

Criteria:

Scheduled and ongoing communication among the Project Manager, Administrative Specialist, Assistant Director, Purchasing and Financial Analyst facilitate transparency in both current and planned financial transactions. This collaborative approach to interactions among Design & Construction, Purchasing and Finance staff is key to the timely recognition of issues that may impact the approved project budget.

Purchasing currently performs or participates in seven critical procurement control functions for each APS construction project:

1. Provides guidance on vendor selection process to maintain compliance with VA Purchasing guidelines.
2. Verifies that vendor selection aligns with Purchasing Policies & Procedures.
3. Provides guidance through each phase on CMR contracts:
 - a. Pre-qualification solicitations by APS on EVA websites;
 - b. Request for bids from pre-qualified vendors;
 - c. Review of bids per pre-determined criteria by internal committee with Purchasing oversight;
 - d. Ranking of bids;
 - e. Vendor interviews; re-ranking of bids.
4. Verifies that Change Orders are

- a. Issued for appropriate reasons, such as unforeseen circumstances, and not for scope expansion;
 - b. Submitted for Board approval in advance if over \$100,000.
5. Reviews for work commencing without an approved purchase order or change order.
6. Provides guidance and verifies competitive negotiation of professional service contracts over \$100,000 and an individual project if total exceeds \$60,000.
7. Attend bi-weekly Design & Construction staff meetings and monthly Capital Coordinating Committee (CCC) meetings to stay abreast of emerging issues

Cause:

As these current functions all are performed by the incumbents who have the background, skills and expertise to meet all these requirements, written process documentation has not been established as a priority.

Effect:

With the planned increase of new projects and recurrent issues affecting ongoing projects, it is important to have a documented procurement control system to allow Purchasing to continue to perform all control functions that have facilitated the timely identification of procurement issues. This pro-active approach has been effective at ensuring the Board is kept informed of all project finances and major changes.

Recommendation:

Suggest all current Purchasing functions, including these seven construction project procurement control functions, be detailed in a written process manual. This could be useful should another staff member need to fulfill any of these control functions.

Management Response:

Date: Sept. 30, 2016 (preliminary) and Jan. 6, 2017 (final)

Office: Finance & Management Services

Staff: Leslie J. Peterson, Assistant Superintendent for Finance & Management Services
David J. Webb, Director, Purchasing

It is recognized that having written processes of the core functions the Purchasing Office provides would be beneficial. To help facilitate the Audit Findings you have identified I have developed draft guidance on those areas of support the Purchasing Office provides specifically to Design and Construction. (Refer to attached DRAFT *Design & Construction / Purchasing Office Processes*.) As this is a draft, changes will be made over the coming months to improve and expand on it.

The Purchasing Office is also currently working with Matt Smith in developing APS –wide written guidelines for the RFP and ITB processes. It is anticipated that both of these will be completed no later than June 30, 2017. This is reliant upon the workload and changing priorities within the Purchasing Office.

<u>Design & Construction/Purchasing Office Processes</u>	
1.	<u>Award of Contracts and Contract Amendments</u>
A.	<u>Types of Contracts</u>
i.	<u>Construction</u>
	<ul style="list-style-type: none"> • Design-Bid-Build (DBB) - Construction costs expected to exceed \$100,000
	<ul style="list-style-type: none"> • Construction Manager at Risk (CMR) – Construction costs expected to exceed \$10,000,000
ii.	<u>Architecture & Engineering (A&E)</u>
	<ul style="list-style-type: none"> • Specific Construction Projects – Aggregate or sum is expected to exceed \$60,000
	<ul style="list-style-type: none"> • Task Order – No single project shall exceed \$100,000. Cost of all projects performed in a one-year period shall not exceed \$500,000
iii.	<u>Construction Manager Advisor (CMA)</u>
	<ul style="list-style-type: none"> • Specific Construction Projects – Cost of services expected to exceed \$100,000
	<ul style="list-style-type: none"> • Task Order – Projects priced are in accordance with Contract terms and conditions
iv.	<u>Purchasing (“Riding”) From Other Public Body Contracts -</u>
	<ul style="list-style-type: none"> • Not permissible for <u>Construction or A&E contracts</u>
v.	<u>Pre-Qualification of Bidders or Offerors</u>
	<ul style="list-style-type: none"> • Used on Construction Contracts

B.	<u>Processes</u>	<u>Control Function</u>
1.	<u>Invitation to Bid (ITB) – Construction - DBB</u>	
a.	Develop ITB Document	<ul style="list-style-type: none"> • Latest approved template is used • Is project specific • All stakeholders, including attorney and Risk Manager, have the opportunity to review/comment
b.	Approve ITB	<ul style="list-style-type: none"> • Confirm needs of APS are captured
c.	Advertise ITB on APS website and eVA	<ul style="list-style-type: none"> • Compliance with School Board Purchasing policies
d.	Pre-Bid Conference	<ul style="list-style-type: none"> • Opportunity for APS to highlight complexity of project • Opportunity for potential Bidders to ask questions/seek clarification
e.	Conduct Bid Opening	<ul style="list-style-type: none"> • Ensure ITB guidelines are followed
f.	Evaluate Bids	<ul style="list-style-type: none"> • Review for responsiveness and responsibility
g.	Approve Award recommendation	<ul style="list-style-type: none"> • Confirm successful lowest Bidder is responsive and responsible
h.	Post Notice of Intent to award a contract	<ul style="list-style-type: none"> • Notifies unsuccessful bidders of award • Starts the window when protests can be received
i.	Consent Item	<ul style="list-style-type: none"> • Compliance with School Board Purchasing policies
2.	<u>Request for Proposal (RFP) – Construction - CMR, A&E and CMA</u>	
a.	Develop RFP Document	<ul style="list-style-type: none"> • Latest approved template is used • Is project specific • All stakeholders, including attorney and Risk Manager, have the opportunity to review/comment

b.	Approve RFP	<ul style="list-style-type: none"> Confirm needs of APS are captured
c.	Advertise RFP on APS website and eVA	<ul style="list-style-type: none"> Compliance with School Board Purchasing policies
d.	Pre-Proposal Conference	<ul style="list-style-type: none"> Opportunity for APS to highlight complexity of project Opportunity for potential Offerors to ask questions/seek clarification
e.	RFP Closing	<ul style="list-style-type: none"> Ensure RFP guidelines are followed
f.	Evaluation of Proposals	<ul style="list-style-type: none"> Review for responsiveness and responsibility
g.	Offeror Interviews	<ul style="list-style-type: none"> Offerors evaluated in accordance with advertised evaluation criteria
h.	Award recommendation	<ul style="list-style-type: none"> Ensure the best proposal, which provides best value, has been selected
i.	Notice of Intent to award a contract	<ul style="list-style-type: none"> Notifies unsuccessful bidders of award Starts the window when protests can be received
j.	Consent Item	<ul style="list-style-type: none"> Compliance with School Board purchasing policies
3.	<u>Purchasing (“Riding”) From Other Public Body Contracts</u>	
a.	Review other public body’s solicitation to confirm Rider language was included	<ul style="list-style-type: none"> Ensure compliance with requirements of VPPA
4.	<u>Pre-Qualification (RFQ)</u>	
a.	Develop RFQ Document	<ul style="list-style-type: none"> Latest approved template is used Is project specific
b.	Approve qualification criterion	<ul style="list-style-type: none"> Compliance with requirements of VPPA

c.	Advertise RFQ on APS website and eVA	<ul style="list-style-type: none"> • Compliance with School Board Purchasing policies
d.	Pre-Qualification Conference	<ul style="list-style-type: none"> • Opportunity for potential Bidders to ask questions/seek clarification
e.	Approve recommendations made by evaluation committee	<ul style="list-style-type: none"> • Ensure determination of qualification is in accordance with criterion advertised in RFQ
5.	<u>Contract Award & Amendments</u>	
a.	Prepare contract documents	<ul style="list-style-type: none"> • Ensure legal compliance • Acceptable to both parties
b.	Consent Items for contract amendments which increase original contract amounts by 25% or \$50K, whichever is greater	<ul style="list-style-type: none"> • Ensure compliance with requirements of VPPA
c.	Approve contract amendments	<ul style="list-style-type: none"> • Confirm amendment is in accordance with contract scope of work
2.	<u>Approve Purchase Orders and Change Orders</u>	
a.	Verify work has not commenced without an approved purchase order or change order being approved	<ul style="list-style-type: none"> • Ensure compliance with School Board's Purchasing Policies
b.	Verify requisition has correct back-up information	<ul style="list-style-type: none"> • Confirm pricing is in accordance with contracted rates
c.	Consent Items for individual Change Orders having a value of \$100K, or greater	<ul style="list-style-type: none"> • Ensure compliance with School Board's Purchasing Policies
d.	Approve Purchase Order	<ul style="list-style-type: none"> • Confirms funding is available • Provides authority for Contractor to commence work