TC (15) Work Step

Review and assess the internal controls in place to ensure:

- **Primavera** is accurate, reliable, and appropriately updated
- To ensure procedures and controls have been adequately implemented to recover any potential lost information
- To ensure procedures and controls have been adequately implemented for recording of proposed change orders
- To ensure procedures and controls have been adequately implemented
- To ensure reconciliation between Munis and Primavera is accurate and complete

Perform a test of these internal controls to assess overall effectiveness.

Results of Testing

Internal Controls Related to Primavera:

The District provided VLS with several documents including, but not limited to, written procedures related to Primavera, project coding instructions, proposed change orders, and change order procedures. The District had developed a manual titled "2014 Construction Procedures Manual," however, based on the testing performed and discussion with District staff, it is outdated and inaccurate. See TC15-1 recommendation for this area.

Effective on 1/1/2016, the Master Scheduler, who is responsible for maintaining Primavera, is working as a consultant under the direction of the District and is no longer a subcontractor under SGI. The Master Scheduler now reports directly to the Engineering Officer. This change in structure provides the District with more control of the Primavera system.

VLS tested a total of 20 bond related contracts (construction and professional services), and 18 of the contracts had not been entered into Primavera at the time of testing. The Board approval of the contracts occurred between July 2015 and February 2016, and the VLS testing occurred in April 2016; therefore, there was up to a nine-month delay in entering contracts in the Primavera system. The Primavera Master Scheduler does not receive a copy of construction and professional services contracts after they are approved by the Board of Education. Therefore, Primavera is not updated with this information until the Master Scheduler generates certain reports from the District server containing the Munis General Ledger data to determine which contracts need to be entered in Primavera. Through this method, the Master Scheduler can determine which construction and professional services contracts are not currently in Primavera; however, the data from the Munis General Ledger only pertains to the current fiscal year. See TC15-2 recommendation for this area.

Primavera Data Recovery:

It appears that the Primavera system has an adequate back-up system and process that would allow the District to recover any information recorded within the system, should the system experience a lapse in performance.

The District has contracted the services of Tempral Logic Systems, a third party provider of hosting services for Primavera. The Primavera system is remotely backed-up nightly; a full back-up is done weekly; and a bare-metal back up is done monthly. A bare-metal back up is what would allow the District to "rebuild" the entire Primavera environment along with the operating system, drive content, databases, network connection, etc., should the system crash beyond any other type of recovery. Because the infrastructure rarely changes, the last weekly and daily back-ups can be applied to the monthly back-up, and the Primavera system would be completely functional and not have lost any information. VLS observed the back-up logs and verified that the back-ups are performed as described. See TC15-1 recommendation for this area.

Recording of Proposed Change Orders;

VLS was provided written procedures and a flow chart for proposed change orders (PCOs) and change orders (COs) and the Change Management overview section[69] from the Primavera training manual. The District has implemented procedures that require PCOs to be identified and entered into Primavera in a timely manner. Based on interviews conducted during Phase I and Phase II, it was communicated to VLS that the procedures were not being followed or enforced by SGI and their employees, which indicates that this may have been an issue with vendor performance. See TC15-3 recommendation for this area.

The District has taken the following steps to ensure that PCOs are identified and entered into Primavera as required:

- The procedures were discussed during a two-day training attended by SGI Construction Managers, District Project Managers and support staff.

- The District has assigned a Project Manager to each bond project, and the Project Managers have taken responsibility for understanding the status of each project and reviewing the PCOs.

- The District has retained the services of a different firm to provide construction management services for the Pinole Valley High School Campus project.

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[69] The Change Management overview section briefly discusses Primavera functions related to RFI, PCO, CO and flow of document(s). The documents mentioned were provided to VLS in order for VLS to gain an understanding of the processes that are followed for recording proposed change orders. FI (11) section assesses whether proposed change orders were recorded into Primavera.

- On 5/25/2016, the Master Scheduler provided Primavera training to the new construction management team. The training covered RFIs, submittals, and change orders.

Reconciliation between Munis and Primavera:

The Master Scheduler created a standard system for generating project numbers that provides consistency in communication between Munis and Primavera. The Bond program management team and support staff uses this standard system for project numbers. In addition, the Master Scheduler and Project Analyst developed a list of Munis-Primavera cost codes that are used by the Bond Finance Department in coding financial documents such as the *Munis Contract & Purchase Order Request Form* and the *Project Budget Amendment/Transfer Form*. This list of "cost codes" includes Primavera cost codes and their corresponding Munis cost codes, which assists the two systems in recognizing each other's transactions. See TC15-1 and TC15-4 recommendations for this area.

As mentioned above, the Master Scheduler does not receive a copy of the construction or professional services contracts for bond projects. This makes it difficult for the Master Scheduler to capture all relevant contracts for bond projects. Although Primavera is able to access the Munis database stored on the District server, the Munis database provides only the current fiscal year expenditures and not the full amount of all approved contracts. The Master Scheduler has to conduct research to determine which contracts are not in Primavera, which may not be the most efficient process for identifying contracts that need to be entered in Primavera.

New Score

Medium

Recommendations

TC15-1. Ensure that written procedures related to Primavera include all required steps and necessary documents in order to achieve and maintain the system's integrity and accuracy. Include the work flow and frequency with which certain steps are (or should be) performed. The written procedures should include, but not be limited to:

    a. The back-up system and process in place,

    b. The process for creating project numbers,

    c. The creation and use of the Munis-Primavera costs codes, and

    d. The process performed by the Master Scheduler to reconcile between Primavera and Munis.

TC15-2. Develop a process that ensures the Master Scheduler receives appropriate and sufficient information regarding new construction and professional services contracts that are approved by the Board of Education. Either a copy of the contract can be provided or a contract synopsis can be prepared and provided to the Master Scheduler. This information should be provided within a week of contract approval to ensure that Primavera is updated promptly. Establish a timeline for when the contract information should be entered after receipt by the Master Scheduler.

TC15-3. Develop and implement a process to ensure that bond program management and staff, construction managers, and third parties responsible for entering information in Primavera are adequately trained and cross-trained. This is particularly important when hiring new staff or consultants. Consider whether providing recurring training or refresher meetings would be appropriate to address deficiencies or problem areas, such as a delay in entering proposed change orders.

TC15-4. Cross-train a District employee in the Primavera functions currently handled by the Master Scheduler, who is a District consultant.

Response by District

TC15-1. The District will request that the Master Scheduler provide written procedures for the required steps and document as noted.

TC15-2. All contracts are entered into Munis, the District's financial system, and require a hierarchy of approvals. Bond contracts are entered using the project string and Munis-Primavera cost codes that were developed to assist the systems in recognizing the transactions for reporting purposes. Currently, general contractor contracts are entered into Primavera to support the proposed change order and change order module, using the attached procedure. The District will develop a flow chart to outline the process for documenting every type of contract.

TC15-3. The Master Scheduler is responsible for the training of all Primavera users. Primavera is a password protected system. The Master Scheduler provides user access and rights within the system. Primavera users are not provided with access or rights within Primavera until they have attended adequate training. The District supports ongoing training to all users and individual users as issues arise.

TC15-4. The District will work with the Master Scheduler to outline the ongoing functions of Primavera and identify the activities that should be cross-trained with District staff. Once the activities are defined they will be assigned to staff with the skills and expertise required to support the functions. The District will request the Master Scheduler provide written procedures for the required activities that are identified as ongoing functions.

VLS's Assessment of Response by District

VLS reviewed the District's response and agrees that the response and planned action are appropriate to address the recommendation(s) made by VLS.