July 16, 2021

Dr. Tomás D. Morales, President  
California State University, San Bernardino  
5500 University Parkway  
San Bernardino, CA 92407

Dear Dr. Morales:

Subject: Audit Report 20-57, Facilities Management, California State University, San Bernardino

We have completed an audit of Facilities Management as part of our 2020-2021 Audit Plan, and the final report is attached for your reference. The audit was conducted in accordance with the Institute of Internal Auditors’ International Standards for the Professional Practice of Internal Auditing.

I have reviewed the management response and have concluded that it appropriately addresses our recommendations. The management response has been incorporated into the final audit report, which will be posted to Audit and Advisory Services’ website. We will follow-up on the implementation of corrective actions outlined in the response and determine whether additional action is required.

Any observations not included in this report were discussed with your staff at the informal exit conference and may be subject to follow-up.

I wish to express my appreciation for the cooperation extended by the campus personnel over the course of this review.

Sincerely,

Vlad Marinescu  
Vice Chancellor and Chief Audit Officer

c: Joseph I. Castro, Chancellor  
   Adam Day, Chair, Committee on Audit  
   Jane W. Carney, Vice Chair, Committee on Audit
EXECUTIVE SUMMARY

OBJECTIVE

The objectives of the audit were to ascertain the effectiveness of operational, administrative, and financial controls related to facilities management and to ensure compliance with relevant federal and state regulations; Trustee policy; Office of the Chancellor (CO) directives; and campus procedures.

CONCLUSION

Based upon the results of the work performed within the scope of the audit, except for the weaknesses described below, the operational, administrative, and financial controls for facilities management as of May 14, 2021, taken as a whole, provided reasonable assurance that risks were being managed and objectives were met.

Our review indicated that overall work order administration within the facilities planning and management department (FPM) needed improvement to ensure that all work orders were prepared to include required information, were updated as the status changed, and were reviewed by management. In addition, we noted that preventive maintenance work orders were not always timely completed, in one instance, an asset was not set up correctly to receive all required preventive maintenance. Further, we noted that FPM did not have a process to periodically perform a comprehensive audit or inventory of keys issued to campus employees. As a result, we found that the key listing maintained by FPM included several employees who were no longer current employees of the campus.

Specific observations, recommendations, and management responses are detailed in the remainder of this report.
OBSERVATIONS, RECOMMENDATIONS, AND RESPONSES

1. WORK ORDER ADMINISTRATION

<table>
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<th>OBSERVATION</th>
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<td>Administration, maintenance, and review of aged work orders needed improvement.</td>
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The campus uses WebTMA as its computerized maintenance management system (CMMS) to capture, assign, monitor, and analyze the status and completion of work orders. Additionally, we noted that dashboards were established in management groups within WebTMA to allow managers to track the status of work orders, and monitoring of aged work orders was primarily conducted through these dashboards. A listing of open work orders as of February 25, 2021, provided by the campus listed 3,074 open work orders, with 423 (14 percent) open from 30 to 60 days, 693 (23 percent) open from 60 to 120 days, and 1,436 (47 percent) open for more than 120 days.

From the work orders aged for more than 120 days, we selected 15 for detailed review. We found that 11 work orders remained open at the time of the audit, and no documentation was available indicating that periodic reviews had been performed by management or that progress had been made toward work order completion.

FPM determined upon review that five work orders should have been cancelled and that four work orders had been completed but had not been recorded as completed.

Proper administration of the work order process enhances service levels, provides greater assurance that assets will be adequately maintained, and allows management to accurately report on state facilities and the resources necessary to maintain them.

RECOMMENDATION

We recommend that the campus:

a. Evaluate the current work order review process and implement improvements to ensure that management consistently reviews aged work orders and documents these reviews.

b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours, material costs, and task details, are completed.

c. Communicate the updated procedures and provide training to key personnel.

MANAGEMENT RESPONSE

We concur. Our action plan to implement the audit recommendations is to:

a. Evaluate the current work order review process and implement improvements to ensure that management consistently reviews aged work orders and documents these reviews.
b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours, material costs, and task details, are completed.

c. Communicate the updated procedures and provide training to key personnel.

The anticipated implementation date for these objectives is September 30, 2021.

2. PREVENTIVE MAINTENANCE

OBSERVATION

We found that scheduled preventive maintenance (PM) tasks were not consistently completed during the pandemic.

PM data obtained from the campus indicated that there were more than 13,000 PM work orders created and scheduled during the audit period. However, we found that 955 of these work orders were canceled prior to completion.

We noted that safety measures implemented by the campus in response to the COVID-19 pandemic and associated regional stay-at-home orders significantly impacted FPM’s ability to perform PM tasks. During the pandemic, a limited number of staff were allowed on campus. As a result, FPM was only able to respond to vital or urgent maintenance and repairs. Of the 955 work orders canceled during the audit period, 126 were canceled before March 2020, when the COVID-19 pandemic began, and 829 were canceled on or after March 1, 2020.

In addition, we performed a detailed review of 20 PM work orders and found that:

- In five instances, PM work orders were canceled before completion.
- In two instances, PM work orders were not timely completed.
- In one instance, an asset was not set up to receive all required maintenance.

Consistent completion of PM provides greater assurance that assets and equipment will perform at peak efficiency and decreases the risk of deterioration.

RECOMMENDATION

We recommend that the campus:

a. Establish a process to monitor compliance with established PM intervals and reinforce training to ensure that PM work orders are timely addressed.

b. Perform a review of assets in WebTMA to verify that asset PM schedules accurately reflect identified PM maintenance requirements.

MANAGEMENT RESPONSE

We concur. Our action plan to implement the audit recommendations is to:
a. Establish a process to monitor compliance with established PM intervals and reinforce training to ensure that PM work orders are timely addressed.

b. Perform a review of assets in WebTMA to verify that asset PM schedules accurately reflect identified PM maintenance requirements.

The anticipated implementation date for these objectives is September 30, 2021.

3. PHYSICAL ACCESS CONTROLS

OBSERVATION

Administration of building access controls needed improvement.

We noted that FPM performed an annual inventory of keys assigned to the University Police. However, we found that there were no self-audit or inventory procedures to periodically review campus keys issued to any other department. Instead, FPM relied on employees and/or their department to notify FPM when they were separating from the campus or no longer needed a key.

We reviewed 20 individuals on the current key listing and found that three had separated from the campus.

Additionally, we compared the list of keys currently issued with the employee separation list provided by Human Resources and Faculty Affairs, and we found that 104 employees, 62 staff, and 42 faculty on the list had separated from the campus between July 1, 2019, and December 31, 2020.

Adequate administration of physical access lowers the risk that keys will be unaccounted for or misused, or that physical security will be compromised.

RECOMMENDATION

We recommend that the campus develop policies and procedures to review physical key issuance records at least annually.

MANAGEMENT RESPONSE

We concur. Our action plan to implement the audit recommendations is to develop policies and procedures to review physical key issuance records at least annually.

The anticipated implementation date for this objective is January 31, 2022.
GENERAL INFORMATION

BACKGROUND

The need to protect the substantial public investment represented by California State University (CSU) facilities and grounds was brought to the forefront in the Legislative Analyst’s Report on the 1979/80 state budget. Subsequently, the Legislature directed the CSU to implement a preventive maintenance program. As a result, the CSU has adopted directives, executive orders and technological tools to ensure that facilities-related assets are adequately maintained.

Executive Order (EO) 847, Facility Maintenance, refines the standards in which campuses maintain CSU facilities. It provides clear definition of operations and maintenance, deferred maintenance and capital renewal requirements to assure efficient and effective use of available maintenance funding. It also requires the university president to ensure that appropriate resources are directed toward meeting the requirement of proper operations and maintenance of the campus physical plant. The CO is currently reviewing and revising EO 847, which was issued in 2003, to reflect more contemporary risks and requirements.

The Capital Planning, Design and Construction (CPDC) department at the CO maintains a space and facilities database (SFDB), a centralized system that provides information about capacity and facilities at each of the 23 campuses. It also provides details regarding custodial space and farm acreage on the campuses and contains information on each facility, including the condition, construction type, gross square footage, and master plan status. CPDC requires each campus to annually update its facility file in the SFDB; this information provides the basis for both the ongoing maintenance budget, as well as the capital outlay program, including funding for any required deferred maintenance for the immediate and subsequent years.

In 2016, CPDC launched a multiyear plan to improve the quality of facilities data in multiple areas of development and operations. The plan included a new energy information system, which streamlined and improved campus monthly utility reporting; refinements in the reporting categories for self-support facilities such as recreation centers, public/private partnerships, and faculty/staff housing; and detailed facility condition assessments (FCA) to update, in a consistent manner, the estimated backlog of renewal needs. CPDC initiated a master enabling agreement with a qualified firm to conduct the FCAs, and by 2020 all campuses had been subject to the standardized review. Information from the FCA reports ensures uniformity in the campus reporting of facility conditions and allows CPDC to more accurately determine annual funding priorities to reduce the capital renewal backlog.

In recent years, funding appropriation challenges in the CSU system have affected facilities maintenance. Each year, CPDC must not only determine how much funding is necessary to maintain the 89 million square feet of facilities systemwide, but also identify, prioritize, and find funds for the backlog of deferred maintenance projects, which the system has reported for 2021/22 to represent $4 billion in potential costs. Using data obtained from the FCA database on May 11, 2021, the estimated total in state-owned capital renewal costs over ten years for California State University, San Bernardino (CSUSB) is $229 million.

The CSUSB campus sits on 441 acres located 10 miles north of downtown San Bernardino. In addition, the campus operates a 194-acre campus located in Palm Desert. The campus
operates and maintains a total 76 buildings encompassing more than 2.9 million square feet of general education, administrative, athletics, lab, utility, and support space. The campus is currently using WebTMA as an enterprise-level CMMS to capture and manage work orders, preventive maintenance, and other facilities and space-related information, integrating with accounting, procurement, scheduling, and other related systems. Staff have remote handheld devices to manage assigned work orders, communicate schedules and tasks, and capture productivity in real time.

At CSUSB, FPM reports to the associate vice president of FPM in the division of Administration and Finance, and its span of responsibility includes maintenance, repair, utilities, and construction efforts of all state-owned buildings campuswide. For self-support units and non-state buildings, such as housing, parking services, and the San Manuel Student Union, FPM provides service on a chargeback basis or recoups costs of labor and materials through the campus cost allocation plan, as appropriate. FPM staff include skilled trades, grounds, and custodial staff and administrative support.

SCOPE

Due to temporary operating procedures and limitations resulting from the COVID-19 public health emergency, we performed fieldwork remotely from March 22, 2021, through May 14, 2021. Our audit and evaluation included the audit tests we considered necessary in determining whether operational, administrative, and financial controls are in place and operative. The audit focused on procedures in effect from July 1, 2019, through May 14, 2021.

Specifically, we reviewed and tested:

- Facilities management administration and organization, to determine whether it includes clear lines of organizational authority and responsibility, and current and comprehensive policies and procedures.

- The comprehensive planned/programmed maintenance schedule, to ensure that it captures all categories of maintenance, including routine, preventive, and deferred.

- The process by which the campus identified facility conditions, including deferred maintenance and capital renewal needs, and annually reported the information to the CO.

- Campus implementation of an effective CMMS to ensure proper administration of maintenance tasks, including scheduling, cost management reporting, and productivity tools to account for resource utilization.

- Campus implementation of effective and efficient custodial and groundskeeping programs that include productivity and performance standards to ensure the work is performed in an effective and efficient manner.

- The campus process to ensure proper capture, tracking, and collection of costs for non-maintenance and auxiliary-related work orders.

- Campus procedures to control access to work order and electronic key access systems and procedures to adequately safeguard the inventory of physical keys to facilities.
As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

Our testing and methodology, which was designed to provide a review of key operational, administrative, and financial controls, included interviews and detailed testing on certain aspects of the campus facilities operations. Our review was limited to gaining reasonable assurance that controls were in place to identify and address facility maintenance needs and did not assess the quality of any repair or maintenance tasks.

CRITERIA

Our audit was based upon standards as set forth in federal and state regulations and guidance; Trustee policy; Office of the Chancellor directives; and campus (and auxiliary, if applicable) procedures; as well as sound administrative practices and consideration of the potential impact of significant risks. This audit was conducted in conformance with the Institute of Internal Auditors’ International Standards for the Professional Practice of Internal Auditing.

This review emphasized, but was not limited to, compliance with:

- EO 649, Safeguarding State Property
- EO 847, Policy Statement on Facility Maintenance
- EO 1000, Delegation of Fiscal Authority and Responsibility
- Government Code §13402 and §13403
- Integrated California State University Administrative Manual (ICSUAM) §9047.01, Space Facilities Database
- ICSUAM §8060.00, Access Control
- ICSUAM §8080.00, Physical Security
- ICSUAM §9047.01, Space Facilities Database
- CSUSB Key and Access Issuance Policy

AUDIT TEAM

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Internal Auditor: Elston Wyatt