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## Audit Report

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### PPDO Service Request Response

Report No. SC-24-06  
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**Approved**  
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## I. EXECUTIVE SUMMARY

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Audit and Management Advisory Services has completed a review of the design and operating effectiveness of internal controls related to the timely response to client requests for services from Physical Plant Services departments. This review was included on our FY23 Audit Plan.

Although the facilities management software, CruzFix, was implemented on 5/1/2022, there is an opportunity to improve the consistency and timeliness of its use. This will help enable CruzFix to function better as a tool to monitor the performance of crews as they address work order requests. PPDO has already been moving in this direction.

The following observation requiring management corrective action is identified below:

### A. Finding

Complete work order information is not entered timely or consistently into CruzFix and there is not a documented CruzFix policy and related standard procedures for its use.

Agreement was reached with management on the recommended actions to address the risks identified in this area. The observation and the related management corrective action are described in greater detail in Section III.

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## II. INTRODUCTION

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### Purpose

The purpose of this audit was to examine the design and operating effectiveness of internal controls related to the timely response to client requests for services from Physical Plant Services departments.

### Background

UCSC Physical Plant Services is a major department of Physical Planning, Development and Operations (PPDO). Its mission is to contribute to the University's mission by operating and maintaining a safe, clean, and efficiently run campus. It provides services in the following areas:

- Facilities and Infrastructure Operations
- Building Maintenance
- Custodial Services
- Grounds and Road Services
- Refuse and Recycling Services

PPDO Business Services provides financial management; store operations; purchasing; computing, work order desk and administrative support and other requested services for Physical Plant Services.

When campus clients require services, they contact the Work Order Desk by email or phone, or enter their work order request in CruzFix. CruzFix is the local name for FAMIS 360, a facilities management software for maintenance; the current version has been in use since 5/1/2022. Work Order Desk personnel enter emailed or phoned work order requests into CruzFix and assign CruzFix work orders to the appropriate crew supervisor or other applicable assignee, such as a “do it now” mechanic. There are many fields in CruzFix that must be filled in either by the Work Order Desk, crew supervisors, or crew members to take advantage of CruzFix’s facilities management capabilities, including reports to assist management with monitoring performance.

Physical Plant Services has a system of priorities to address work order requests within certain times (see Section III for more details). Meeting these service levels requires an adequate work force. PPDO received support to bolster service levels by increasing staffing by 48.5 FTE, approved to start 7/1/2022. Additional staff has helped to make up for the loss of FTE it experienced due to severe budget cuts the campus went through a decade ago.

While the increase in FTE has improved service levels there is still room for improvement. We ran a CruzFix Overdue Work Order report that covered calendar year 2022 to 11/14/2023. This showed a wide range of overdue work orders by departments, ranging from one overdue work order of the Fire Alarm department to 417 overdue work orders by the HVAC department (see the table below).

*Overdue Work Orders 2022-11/14/23<sup>1</sup>*

<b>Department</b>	<b>Overdue Work Orders</b>
BMS	114
Carpentry	147
Cogen	4
Electrical	86
Fire Alarm	1
Groundskeeping	16
High Voltage	5
HVAC	417
Lighting	52
Lockshop	85
Painting	20
Pest	122
Plumbing	87
Refuse/Recycling	11
Signs	21

**Scope**

Once we learned of the increase in FTE, we focused our review of work order request responses to the use of CruzFix for monitoring work order performance. We consulted with management to understand its features and the significance of fields. We obtained CruzFix procedures from different Physical Plant Services departments to understand their expectations and assess the quality of those procedure documents. The two CruzFix reports we ran were:

- The Work Done report that provides information on work order requests, crew assignments, estimated labor hours, actual labor hours, when the work was completed, etc.
- Overdue Work Order reports for 15 Physical Plant departments.\*

The audit was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing prescribe\*d by The Institute of Internal Auditors.

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\* We did not run overdue work order reports for custodial services as these services are divided variously according to day and night shifts as well as areas of the campus. The departments we ran this report for demonstrate our point that there is room for improvement.

### III. OBSERVATIONS FOR MANAGEMENT CORRECTIVE ACTION

<b>A. CruzFix Policy and Related Procedures</b>		
Complete work order information is not entered timely or consistently into CruzFix and there is not a documented CruzFix policy and related standard procedures for its use.		
<b>Risk Statement/Effect</b>		
When complete information is not entered timely into CruzFix, it undermines the potential for CruzFix to be used as a tool to monitor timely response and completion of work orders. Further, without a documented CruzFix policy and standard procedures for its use CruzFix may be used inconsistently.		
<b>Agreement</b>		
<b>A.1</b>	Establish a policy with related standard procedures to ensure CruzFix is populated with required information consistently and timely, and used to manage work order performance.	<b>Implementation Date</b>
		May 1, 2024
		<b>Responsible Manager</b>
		Director, Business Services, PPDO

#### A. CruzFix Policy and Related Procedures – Detailed Discussion

We ran a CruzFix Work Done report that covered the period of July 5, 2022 to March 9, 2023, which entailed 418 work orders. 95 of those work orders (23%) had an actual completion date greater than five months past the start date. 72 of the 418 work orders (18%) did not have actual labor hours reported. And there were no hours listed for estimated labor hours.

There is a system of priorities to address work order requests within a certain time. These include:

- P1 Emergency: 1-day completion
- P2 High: 7-day completion
- P3 Medium: 30-day completion
- P4 Low: 60-day completion

There are other priorities, but we limited our examination to these four.

The majority of the 95 work orders with greater than five-month completion dates may have been finished timely, but were entered into CruzFix late. The completion date is an important detail for which there should be no doubt about.

We were told that there are two fields for job hour estimates: simple estimates and detailed estimates. The estimated labor hours on the Work Done report requires detailed estimates. Although supervisors may be filling in simple estimates, we encourage them to fill in the detailed estimate to ensure the Work Done report’s

estimated labor hours are recorded. Alternatively, the Word Done report program might be edited to replace the detailed estimate with the simple estimate. This will help management understand within one CruzFix report the accuracy of estimates in comparison with actual labor hours.

We understand that sometimes actual labor hours are not entered because some work orders are addressed by a standing work order, such as for custodial work. There are also work orders assigned to Admin for administrative purposes without a record of actual labor hours. However, the other departments should be recording their actual labor hours to ensure work orders are addressed timely according to their priority.

There was not a standard procedure document on how to use CruzFix for work order management. We requested documented procedures from different departments and found differences in details and thoroughness. In one case, the documented process was created for our request. There is some justification for different departments having different procedures, such as when personnel have limited access to computers.

We believe that standard work order procedures showing the flow of work is important for training and communicating expectations by management for performance monitoring. Practices that are unique for a department can be added, such as an appendix, to the standard procedures.

**APPENDIX A. SUMMARY OF WORK PERFORMED AND RESULTS**

<b>Preliminary Analysis</b>	
<b>Work Performed</b>	<b>Results</b>
<p>Background Information We obtained and reviewed the following pertinent documentation relating to operations the area audited:</p> <p>A: General Information</p> <ul style="list-style-type: none"> <li>• Organization charts</li> <li>• Goals and objectives</li> <li>• Descriptions of how CruzFix is used</li> <li>• Added FTE starting in FY23</li> </ul> <p>B: Information System: obtained additional access to CruzFix</p>	<p>A. UCSC Physical Plant Services is a major department of Physical Planning, Development and Operations (PPDO). Its mission is to contribute to the University's mission by operating and maintaining a safe, clean, and efficiently run campus.</p> <p>PPDO Business Services provides financial management; store operations; purchasing; computing, work order desk and administrative support and other requested services for Physical Plant Services.</p> <p>When campus clients require services, they contact the Work Order Desk by email or phone, or enter their work order request in CruzFix. CruzFix is the local name for FAMIS 360, a facilities management software for maintenance; the current version has been in use since 5/1/2022.</p> <p>We reviewed documents that described how CruzFix is used by the following departments:</p> <ul style="list-style-type: none"> <li>• Custodial Services</li> <li>• Grounds</li> <li>• The Work Order Desk</li> <li>• Fire Alarm Shop</li> <li>• Physical Plant Services Head Office</li> </ul> <p>PPDO received support to increase staffing by 48.5 FTE, approved to start 7/1/2022. This increase bolstered service levels.</p> <p>B. With increased access to CruzFix we were able to identify and run reports that helped us identify opportunities to improve its use.</p>
<p>Interviews: We conducted interviews needed to complete the preliminary survey. Jen Hale, PPDO Business Services director, was our primary contact</p>	<p>Jen answered our questions regarding CruzFix functionality and helped us understand reports that we ran. She also provided additional information, such as the FTE added for FY23.</p>
	<p>Developed a risk matrix and audit program to address the risk areas identified.</p>

<b>Fieldwork</b>	
<b>Work Performed</b>	<b>Results</b>
<p>We ran a CruzFix Request Work Done report for FY23 plus July through September 2023</p>	<p>From 7/5/2022 to 3/9/2023 there were 418 WOs in the Work Done report. 95 of those WOs (23%) had an actual completion date greater than five months past the start date. Further, 72 of the 418 WOs (18%) did not have actual labor hours reported. There were no hours listed in the Estimated Labor Hours column. This is because estimated hours are entered into a simple estimate in a different form and not the detailed estimated labor hours that are captured in the Work Done form. Moving from simple to detailed estimated labor hours should be encouraged. Alternatively, the report might be edited to replace the detailed labor estimate with the simple estimate. We conclude that more effort is needed to ensure CruzFix reports can serve as an effective means to monitor timely responses to WO requests</p>
<p>We ran 15 Overdue Work Order reports on 11/13/2023</p>	<p>There was a wide range of overdue work orders by department from 1 in Fire Alarm to 417 in HVAC. Overdue work orders were found in calendar years 2022 and 2023. We believe these WO should have been closed if work was done and administrative processes were completed.</p>
<p>We compared documents that described how CruzFix is used by a sample of departments.</p>	<p>There was not a published CruzFix policy or standard procedures. The documents we received differed in detail and completeness. While we understand that procedures may vary among departments, we believe there should be a basic presentation of how CruzFix should be used. This will assist training and provide a standard for evaluating performance.</p>