

University of California  
San Francisco



**Audit Services**

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**SUBJECT: Construction Audit  
Project #12-050**

At the request of the Office of the President (UCOP), Audit Services (AS) completed a limited review of construction processes in the Main Campus Capital Programs Division and Medical Center's Design and Construction department at the University of California, San Francisco (UCSF). As part of the system-wide audit, AS reviewed three key functions within each unit: bidding and contracting, change orders management, and monitoring process when funding restrictions exist. Over the past three fiscal-years, UCSF's construction project expenditures have totaled approximately \$1.4 billion for the Main Campus, and \$915 million for the Medical Center.

In conducting the review, AS interviewed key personnel from various offices<sup>1</sup> responsible for the three functions included in the audit scope. In addition, AS reviewed source documentation from a sample of construction projects to evaluate the extent to which existing processes are in compliance with the UC Facilities Manual and mitigate financial risk to the campus. To evaluate bidding, contracting, and change order procedures, AS judgmentally selected one active Campus construction project; the Medical Center Parking Garage at Mission Bay – Phase 1 (Medical Center Garage Project), for detail testing. To evaluate procedures around funding restrictions, AS judgmentally selected three Campus projects and reviewed documentation pertinent to funding restrictions.

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<sup>1</sup> Offices interviewed included Contract Services, Finance, Capital Budgeting and Project Management, and Medical Center Design and Construction Office.

The Main Campus and Medical Center construction bidding and contracting processes were well developed and adhered to the UC Facilities Manual; the core document governing construction activities for the UC System; had developed adequate procedures to manage change orders and have reasonable practices to monitor and review funding restrictions. The staff members interviewed from the various offices were knowledgeable, experienced and familiar with the requirements of the Facilities Manual.

Although there were no procedural deficiencies identified during the review, AS did identify a policy issue surrounding change orders.

#### **A. Change Orders for Design Build Construction Contracts**

The Medical Center Garage Project is being constructed under a design-build delivery system. It contrasts from the traditional construction approach (i.e., design-bid-build) in which the University would have separate contracts with the building architect and general construction contractor. With the design-build construction delivery system, the University is contracting with a single entity as the design builder with the intent of reducing costs and delivery time by overlapping design and construction phases. By combining the design and construction phases, "change orders" are often executed to communicate design enhancements prior to and during the construction phase of a project. This deviates from the traditional design-bid-build delivery model system where the amount of change orders is expected to be substantially less as the design of the project is completed prior to the building phase.

We reviewed five executed change orders in excess of \$100,000 for the Medical Center Garage Project for adequate supporting documentation approval and compliance with the UC Facilities Manual. All change orders were properly approved with adequate documentation supporting the cost. When inquiries were made of Capital Programs as to the justification for not competitively bidding the change order work, they advised these should not be considered change orders as found in a design-bid-build project but instead design changes (enhancements) appropriate to the projects and funded from the project's contingency pool. Capital Projects stated that design changes over \$100,000 on design-build projects and executed on change orders are never competitively bid. Capital Projects did recognize that design enhancements were processed on documents that were titled "change order" and this was inconsistent with their assertion that these should not be considered "traditional" change orders.

AS found that the UC Facilities Manual did not address design changes on design-build projects and requirements that needed to be followed in processing them. Subsequently, AS consulted with UCOP Construction Services and they agreed in principle that design changes on construction projects using a design-build delivery system did not need to be bid.

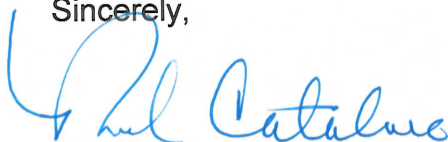


To improve internal controls for design enhancements on design-build construction projects, Capital Programs will be updating internal procedures and records to differentiate the requirements for processing design enhancements and change orders. In addition, once the procedures and records have been prepared, Capital Programs will communicate the new procedures to the staff. Capital Programs expects that all the actions to address this matter will be implemented by September 30, 2012.

AS will communicate to the UCOP Ethics, Compliance, and Audit Office that a recommendation should be presented to UCOP Construction Services to revise the UC Facilities Manual to address requirements for handling design changes for construction projects using a design-build construction delivery model.

We extend our thanks to the personnel of the Project Management, Finance, Capital Budgeting, and Medical Center Design and Construction offices for their support during this review. Please do not hesitate to contact me should you have any questions.

Sincerely,



Rick Catalano  
Director

c: Chief Operating Officer Jones  
Senior Vice Chancellor Plotts  
UCSF Audit Committee