

**UNIVERSITY OF CALIFORNIA, IRVINE
ADMINISTRATIVE AND BUSINESS SERVICES
INTERNAL AUDIT SERVICES**

**CONSTRUCTION
Report No. I2013-107**

April 11, 2013

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April 11, 2013

SHERYL VACCA
SENIOR VICE PRESIDENT/CHIEF COMPLIANCE AND AUDIT OFFICER

RE: CONSTRUCTION
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Internal Audit Services has completed the review of Construction and the final report is attached.

Please let me know if you have any questions regarding this document.



Mike Bathke
Interim Director
UC Irvine Internal Audit Services

Attachment

C: Terry Belmont, Chief Executive Officer, UC Irvine Medical Center
Rebekah Gladson, Associate Vice Chancellor and Campus Architect
Alice Issai, Chief Operating Officer, UC Irvine Medical Center
Gary Krekemeyer, Director of Campus Operations, Design and Construction Services
Leon Roach, Director, Capital Design and Construction Projects
Audit Committee

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I. BACKGROUND

University of California (UC), Irvine (UCI), Internal Audit Services (IAS) conducted a construction review at the request of the UC Office of the President. Although this review was performed at all UC campuses, an audit program based on local risks was developed for this review.

II. PURPOSE, OBJECTIVES, AND SCOPE

The purpose of the review was to assess the adequacy of the internal controls and construction management processes over contractor allowances, change order execution, contractor payment application review, compliance with contractor insurance and bonding requirements, information systems, and overall compliance with UCI policies and the UC Facility Manual (FM). The scope of the review included capital projects from both the UCI campus and UC Irvine Medical Center (Medical Center) in progress within the last year. IAS selected five major capital projects for detailed review.

The review included the following procedures:

1. Reviewed local and systemwide policies related to campus and Medical Center construction;
2. Interviewed management and other key personnel responsible for construction management activities at the campus Department of Design & Construction Services (D&CS) and Medical Center Department of Planning Administration (PA);
3. Reviewed and evaluated practices for use of contractor allowances, payment application review, and insurance and bonding requirements;
4. Reviewed the change order review and approval processes and procedures;
5. Reviewed change order documentation for adequate support, and to determine if the scope of work was reflected in the change order;
6. Reviewed change orders for labor and material pricing accuracy, and accurate calculations of construction charges and fees; and
7. Reviewed the systems used for maintaining capital project information and financial data.

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III. CONCLUSION

Based on our review, the contractor allowance, payment application review, insurance/bond, and information systems processes appear to be satisfactory and functioning in accordance with UCI policies and FM requirements.

However, IAS noted certain change orders reviewed lacked detailed support for labor and materials that are necessary to accurately quantify and calculate costs.

Observation details and recommendations were discussed with management who formulated action plans to address the issues. These details are presented below.

IV. OBSERVATION AND MANAGEMENT ACTION PLAN

1. Insufficient and/or Missing Change Order Cost Documentation

Background

A change order may revise, increase, or delete previous requirements of the construction work, contract terms and conditions, adjust the contract total sum, and/or adjust the contract time. Change orders may not be executed until the contract has been signed by University authorized personnel and the contractor (except unilateral change orders).

Observation

IAS judgmentally selected and reviewed 12 change order requests (CORs) valued at approximately \$3 million from six different change orders from both Medical Center and campus capital projects.

IAS noted that certain contractors did not provide sufficient documentation to support their COR costs, specifically in the areas of labor and materials. Of the 12 CORs reviewed, six CORs did not have sufficiently detailed documentation to support approximately \$2.7 million (90 percent) of labor/materials costs. Additionally, certain contractors from four CORs did not provide any documentation to support \$28,000 (1 percent) of labor/materials reflected on their cost proposals.

The FM Volume 5, Part II, Section 3.2.1, Cost Proposals, and General Conditions, authorizes compensation for extra work based on actual cost plus a contractor fee. The contractor is paid for the actual time spent by the contractor's employees and subcontractors and the materials they actually used. The contractor is required to keep daily records of its actual costs, and submit them on a weekly basis for approval by the University's representative. As a result, the contractor should be able to

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provide sufficient labor breakdown, material quantity and unit price details on every project.

Failing to provide adequate documentation to support actual time spent and materials used could result in improper payments and contractor fees and violate UCI policies and FM requirements.

Management Action Plan

PA

PA will continue the training program developed internally for staff and for general contractors and subcontractors. The training program and materials will include a cost proposal template with cost summary categories and detailed instructions on completing the required University exhibit. Additionally, PA's budget was recently approved to allow for the recruitment of a dedicated financial analyst to review all change orders. PA expects this position to be filled by May 1, 2013.

D&CS

D&CS utilizes the design build delivery method for project construction. Generally, D&CS receives estimated cost schedules from contractors for work requested through a change order. When a significant change order is issued, the Design Build contractor will provide an estimate, guaranteed maximum cost, for the scope of work. The estimate is based on input from the design team, subcontractors and the general contractor. As construction progresses, the contractors provide additional, detailed documentation supporting the actual costs incurred. If any material discrepancies are noted, the contract sum is subsequently adjusted to ensure the appropriateness of amounts paid to the contractor.

As of March 2013, detailed labor/materials cost documentation has been requested from the sampled contractor and will be reviewed upon receipt to determine if any contract adjustments are needed.