CALIFORNIA STATE UNIVERSITY,
MONTEREY BAY

NORTH QUAD STUDENT HOUSING PHASE I PROJECT

Final Report

April 19, 2006
CONSTRUCTION PROJECT EVALUATION

CALIFORNIA STATE UNIVERSITY, MONTEREY BAY

NORTH QUAD STUDENT HOUSING PHASE I PROJECT

April 19, 2006

Prepared by:

KPMG LLP
801 Second Avenue, Suite 900
Seattle, WA 98104

This report and all associated analysis contained herein are based upon information made available to KPMG LLP. KPMG LLP is not responsible for incomplete or inaccurate information provided during the preparation of this report. This report only presents and summarizes factual data and does not represent an opinion or attestation to the position, approach or representation of information made by any other party involved with this evaluation.
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Purpose</td>
<td>5</td>
</tr>
<tr>
<td>Scope</td>
<td>5</td>
</tr>
<tr>
<td>Methodology</td>
<td>6</td>
</tr>
<tr>
<td>Exclusions</td>
<td>6</td>
</tr>
<tr>
<td>Project Background</td>
<td>7</td>
</tr>
<tr>
<td>Field Work Overview</td>
<td>7</td>
</tr>
<tr>
<td>Delivery Methodology</td>
<td>7</td>
</tr>
<tr>
<td>Timeline</td>
<td>7</td>
</tr>
<tr>
<td>Project Costs</td>
<td>8</td>
</tr>
<tr>
<td>Design Costs</td>
<td>9</td>
</tr>
<tr>
<td>Construction Bid Process</td>
<td>10</td>
</tr>
<tr>
<td>Subcontractor Compliance</td>
<td>11</td>
</tr>
<tr>
<td>Construction Change Orders</td>
<td>13</td>
</tr>
<tr>
<td>Change Order Report Analysis</td>
<td>17</td>
</tr>
<tr>
<td>Labor and Fringe Burden</td>
<td>18</td>
</tr>
<tr>
<td>Project Management Inspection Services</td>
<td>19</td>
</tr>
<tr>
<td>Major Equipment / Materials Review</td>
<td>20</td>
</tr>
<tr>
<td>Close-Out Process</td>
<td>21</td>
</tr>
<tr>
<td>Liquidated Damages</td>
<td>22</td>
</tr>
<tr>
<td>Accounting</td>
<td>23</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Summary of Findings

Based upon our evaluation, the CSU Monterey Bay North Quad Student Housing Phase I Project was generally administered consistent with governing Trustee policies and procedures. Certain control weaknesses surrounding the contracting and change order administration processes were observed, which should be addressed.

Our observations, associated risks and recommendations are outlined below:

<table>
<thead>
<tr>
<th>Observation</th>
<th>Risk</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The contractual agreement with the Contractor was signed into effect on February 17, 2003. It contains an effective date of November 1, 2002. The Contractor submitted three requests for payment during this interim time in the total amount of $1,565,980 prior to February 17, 2003 indicating that work was under way without a formal contract in place.</td>
<td>Allowing work to begin on a project before a contract with protective language is in place exposes CSU to unnecessary contractual risks.</td>
<td>As a better practice, sufficient contractual agreements should be signed and effective before any work commences on a project. (Ownership: CSUMB)</td>
</tr>
</tbody>
</table>
| 2. There was no formal List of Subcontractors form provided to CSUMB by Webcor once the subcontractors were determined, as required by the Design-Build Contract General Conditions. | Lack of a formal List of Subcontractors may result in a violation of the Subletting and Subcontracting Fair Practices Act and may be contrary to intended Trustee policy. | 2a. In the future, the campus should ensure Design-Builders submit the List of Subcontractors on the required form in a timely manner. (Ownership: CSUMB)  
2b. SUAM Section 9800 should be modified to include clear instructions to Campuses on how to administer the requirement of using listed subcontractors for Design-Build contracts. (Ownership: CPDC) |
<p>| 3. Not all change orders contained the CSU Contractor Change Order Request Summary form. This form forces the contractor to break out the mark-up of the Subcontractor amounts and helps the contractor calculate mark-up correctly. | CSU may be overpaying due to mark-up being charged on mark-up. Many subcontractors submit a lump sum quote to the contractor without breaking out the mark-up on the quote. If the contractor simply uses the lump sum amount to calculate markup, then CSU may be overcharged. | In the future, require the CSU Contractor Change Order Request Summary form to be correctly completed by the Contractor prior to execution. (Ownership: CSUMB) |</p>
<table>
<thead>
<tr>
<th>Observation</th>
<th>Risk</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. The contractor did not consistently calculate mark-up per the requirements in SUAM. CSUMB did not always correct the contractor’s mark-up calculation on deductive changes.</td>
<td>Incorrect calculation of a change order mark-up may lead to CSUMB overpayment to the Contractor.</td>
<td>4a. CSUMB should determine whether recovery of the inaccurately calculated changes is permissible and re-calculate mark-up on change orders containing large subcontractor amounts or credits. (Ownership: CSUMB)</td>
</tr>
<tr>
<td>5. At times, supporting change order documentation was missing or otherwise limited.</td>
<td>CSUMB may be at risk of overpaying for change order work if detailed quotes and supporting cost documentation is missing or not properly evaluated. In addition, CSUMB may not be able to establish the basis for the pricing and scope of work at a later date. This may be important in a dispute situation.</td>
<td>In the future, CSUMB should include sufficient supporting documentation with each executed change order. It should be possible for an outside party to determine the basis for the cost and the scope of work agreed to in the change order. (Ownership: CSUMB)</td>
</tr>
<tr>
<td>6. The change order signature requirement is based on the net change order amount.</td>
<td>An individual with a relatively low signature authority can potentially authorize an unlimited dollar amount of change orders if there is a large enough credit on the change order in addition to the additive amounts.</td>
<td>In the future, consider use an absolute amount of individual change order line items to arrive at the correct level of signature authority required to execute the change order. (Ownership: CPDC)</td>
</tr>
<tr>
<td>7. Work was being performed by the project management consultant before the contract was fully executed.</td>
<td>Allowing work to begin on a project before a contract has been signed into effect exposes CSU to contractual risk.</td>
<td>See Recommendation 1.</td>
</tr>
</tbody>
</table>
INTRODUCTION

Purpose

KPMG LLP (“KPMG”) was retained by California State University’s (“CSU”) Office of the University Auditor on October 29, 2004 to perform an independent project evaluation of California State University, Monterey Bay’s (“CSUMB”) North Quad Student Housing Phase I (“the Project”).

The overall objective of the construction evaluation was to assess construction management practices for the Project and to substantiate that it was managed in accordance with law and Trustee policy.

This report provides conclusions and recommendations addressing potential recovery of project costs and process improvements to the extent they were uncovered as part of our work. Recommendations are listed and numbered sequentially throughout this report.

Scope

While the basic scope of our work matches that required by the RFP and that which KPMG has performed in years past, we also included additional tasks we believe may provide value to CSU. KPMG identified specific areas within the scope listed below that present potential for substantive loss or liability for the CSU Monterey Bay’s University North Quad Student Housing Phase I Project. The various scope categories are outlined in CSU’s Request for Proposal, dated July 14, 2004 and KPMG’s Proposal, dated July 27, 2004 and contains the following sections:

- Project Background
- Design Cost
- Construction Bid Process
- Construction Change Orders
- Project Management Inspection Services
- Major Equipment/Materials
- Close-Out Documentation
- Liquidated Damages
- Accounting
INTRODUCTION

Methodology

KPMG’s approach to this engagement incorporates a work plan shared with the University Auditor’s office as outlined in our Agreement with CSU. During the course of our work we expanded on tasks related to scope sections with the highest potential risk exposure. The work performed by KPMG was conducted in accordance with our aforementioned Methodology, but is not limited to, the following tasks:

- Examine financial records, reports, written CSU procedures, University contract documents and other material related to the Project and compare current practices and procedures with CSU requirements;
- Conduct a preliminary review to determine project emphasis;
- Interview key individuals involved in the project;
- Identify significant deficiencies, if any;
- Recommend changes that may result in streamlining the design/construction process, helping to assure adequate project controls and reducing costs; and
- Prepare a written report of our findings and recommendations.

Exclusions

The services, fees and delivery schedule for this Engagement are based upon the following assumptions, representations or information supplied by CSU (“Assumptions”).

1. KPMG is not responsible for and will not make management decisions relating to this Project or any other aspect of CSU’s business. CSU shall have responsibility for making all decisions with respect to the management and administration of its real estate and capital projects.

2. CSU management accepts responsibility for the substantive outcomes of this engagement and, therefore, has a responsibility to be in a position in fact and appearance to make an informed judgment on the results of this engagement.

3. Our work under this engagement did not include technical opinions related to engineering, operations and maintenance.

4. KPMG’s work under this engagement did not include a review, audit or evaluation of financial statements, tax services, or other services of KPMG not listed in the above methodology.

5. We have, and will continue to consider the effect of this Engagement on the ongoing, planned and future audits, as required by Government Auditing Standards and have determined that this engagement will not impair KPMG’s independence.
PROJECT BACKGROUND

The scope of work for North Quad Student Housing Phase I Project consists of three courtyard suite buildings and four walk-up apartment buildings totaling approximately 182,000 gross square feet, providing 708 new beds of student housing and parking for approximately 550 cars. The project includes design completion and construction of student housing buildings, all site development, site utilities, parking lots, ramps, sidewalks, curb cuts, landscaping, site lighting, and signage. The site is within 50 acres designated for a new residential neighborhood. The Phase I project site is approximately 17 acres at the southern end of the new North Quad neighborhood.

Field Work Overview

During the week of November 28 – December 2, 2005, KPMG conducted its field work and reviewed project records from the following entities involved with the North Quad Student Housing Phase I project:

- General Contractor: Webcor Construction, Inc. (“Webcor”)
- Architect: Hornberger & Worstell, Inc. (“HWI”)
- Construction Management and Inspector of Record (“IOR”): Douglas E. Barnhart, Inc.
- Project Management: CSUMB Campus Development & Operations

Follow-up discussions to clarify issues and supplement supporting documentation were conducted through the completion of this report.

Delivery Methodology

The project was delivered using a modified Design-Build, Lump Sum contract.

Project Timeline

The North Quad Student Housing Phase I had a delayed start. Although the need for the project was identified in late 1999 or early 2000, the planning process did not commence until March 2002 with a feasibility study conducted by Kwan Henmi Architecture and Planning, Inc. A modified design-build request for Qualifications was issued on June 25, 2002. On October 17, 2002 Webcor Construction, Inc. was awarded the contract and the project began on November 19, 2002 (Notice to Proceed) with a scheduled completion date of August 1, 2004. The project obtained a Certificate of Occupancy on August 4, 2004. Notice of Completion was executed on September 27, 2004 and Certification of Completion was completely signed on November 9, 2004.
Project Costs

The project was approved by the Board of Trustees for $37,700,000 in September, 2002 for all preliminary design, working drawings, and construction. The budget was revised in October 2002 to $39,048,790, as estimates were refined across all categories and construction bids were received. The Board of Trustees approved this refined estimate in November, 2002. At the completion of the contract, expenditures totaled $39,048,790. This cost included approximately $577,468 of upgrades to the Central Plant, which was not part of the original project cost. As the project progressed it was deemed necessary and providing an overall future benefit for the Campus. The additional cost was as a result of installing distribution piping in between the buildings providing the capability to connect the North Quad buildings to the Central Plant. Without the additional expenses for the Central Plant upgrades, the total project costs were $38,471,322.

<table>
<thead>
<tr>
<th>2-7 ITEM</th>
<th>BUDGET</th>
<th>COMMITTED</th>
<th>PAID</th>
<th>BUDGET BAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Total Construction (note1)</td>
<td>$37,013,738</td>
<td>$37,161,545</td>
<td>$37,161,545</td>
<td>$(147,807)</td>
</tr>
<tr>
<td>6a. Architect Services During PW Phase</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6b. Architect Services During Construction</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6c. Contract Management Services</td>
<td>1,543,052</td>
<td>1,598,736</td>
<td>1,598,736</td>
<td>$(55,684)</td>
</tr>
<tr>
<td>6d. Contingency (note 2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Additional Services During PW Phase</td>
<td>419,500</td>
<td>147,495</td>
<td>147,495</td>
<td>272,005</td>
</tr>
<tr>
<td>9. Additional Services During Construction Phase</td>
<td>72,500</td>
<td>141,013</td>
<td>141,013</td>
<td>$(68,513)</td>
</tr>
<tr>
<td>11. Group II Equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12. GRAND TOTAL</td>
<td>$39,048,790</td>
<td>$39,048,790</td>
<td>$39,048,790</td>
<td>-</td>
</tr>
</tbody>
</table>

Note 1: Total construction includes the following 2-7 items:
- Total construction: $30,861,038
- Plus: Architect services during pw phase: $880,000
- Plus: Architect services during construction: $2,203,970
- Plus: contingency: $1,697,357
- Plus: Group II equipment: $1,371,373
- Total: $37,013,738

Note 2: Contingency allocation:
- 2-7 Contingency budget: $1,697,357
- Allocate to 5. Total Construction: $(1,697,357)
- Contingency budget balance: $-
DESIGN COSTS

The Project was delivered using a Design-Build methodology. As such, CPDC and CSUMB had no direct contractual relationship with an Architectural firm. The Contractor, Webcor, was solely responsible for selecting the Designer.

Webcor selected Hornberger & Worstell (“HWI”) as the main architectural design firm for the North Quad Student Housing Phase I project. The value of the contract between Webcor and HWI was $626,000 and represents 28% of the $2,203,970 total design costs presented in the bid package. Other design costs include landscape design, structural engineering, mechanical, electrical and plumbing (“MEP”) services, bond, insurance and general conditions related to the design phase.

KPMG reviewed a sample of invoices from the design-builder for the design phase of the project. Nothing came to KPMG’s attention that would indicate any discrepancies between the fees paid by CSU and the contractual amounts invoiced by Webcor.

Recommendation:

None
CONSTRUCTION BID PROCESS

The Design-Build bid process was administered by CSUMB Department of Campus Development & Operations and the Office of Business & Support Services.

A Request for Qualifications (“RFQ”) was issued on June 25, 2002. Advertising was placed and a pre-submittal conference was held on July 9, 2002. Eleven contractors subsequently submitted Statement of Qualifications in response to the RFQ. The eleven contractors were evaluated by CSUMB through a short listing process. On August 12, 2002, five contractors were chosen as finalists to continue with the Request for Proposal (“RFP”) process. These contractors included Bovis Land Lease, Keller Builders, Ambling Companies, Webcor Builders, and J.R. Roberts Corporation.

The budget for the project as stated in the RFP was $32,000,000. Six addenda were issued before the RFP was due on October 14, 2002. CSUMB realized through discussions with the prospective bidders and refinement to the scope through the RFP process that the initial budget of $32,000,000 would not be sufficient. The addenda addressed questions by the bidders, amended specifications, provided additional reference materials for the bidders, and raised the budget to $34,000,000. Of the five finalists, Webcor Builders, J.R. Roberts Corporation, and Ambling West submitted proposals. Ambling West was disqualified as non-responsive due to failure to submit a bid bond in their proposal, but the remaining two bids were evaluated based on price and quality points. Webcor earned the highest quality points and was the lowest bidding contractor at $33,958,380, and was awarded the contract on October 17, 2002.

KPMG reviewed CSUMB's bid files and bid process and found the project administrative process in compliance with requirements related to pre-bid meeting, advertising for bids, distribution of project plans and specifications, review of bid proposal package, addenda during bidding, pre-qualification of bidders, obtaining required documentation from the successful bidder, and award of contract.

The contract between the Trustees of the California State University and Webcor Construction, Inc. appears to be the standard Agreement without modification and was entered into effective November 1, 2002 in the amount of $33,958,380. However, the Agreement was not signed by General Counsel until February 17, 2003. Other signatures are not dated. CSUMB reported issues surrounding the liquidated damages clause, which delayed the execution of the contract. An addendum to the Agreement was executed on March 3, 2003 addressing liquidated damages.

Observation:

The contractual agreement between CSUMB and Webcor was signed into effect on February 17, 2003 although it contains an effective date of November 1, 2002. Webcor submitted three Requests for payment during this interim time in the total amount of $1,565,980 prior to February 17, 2003 indicating work was under way without a formal contract in place.
**CONSTRUCTION BID PROCESS**

**Risk:**

Allowing work to begin on a project before a contract with protective language is in place exposes CSU to unnecessary contractual risks.

**Recommendation:**

1. As a better practice, sufficient contractual agreements should be signed and effective before any work commences on a project.

   (Ownership: CSUMB)

**Campus Response:**

1. Campus concurs and will make certain that contractual agreements be fully executed prior to a Notice to Proceed letter being issued to the Contractor. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.

**Subcontractor Compliance**

As this was a design-build contract, no list of subcontractors could be submitted at the time of bid; however an Expanded List of Subcontractors must still be maintained, per Webcor’s contract with CSUMB. According to the Contract General Conditions, Article 32.05, each subcontractor must be added to the Expanded List of Subcontractors as they are selected. An informal subcontractor tracking log was submitted by Webcor in August 2003, however at this time most of the trades had been selected and subcontractors were on site conducting work.

SUAM and the CSU Construction Management Procedures Manual do not currently contain express language on how evaluate a list of subcontractors for Design-Build contracts. The Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100-4117) does not offer express directions for Design-Build situations either.

**Observation:**

There was no formal Expanded List of Subcontractors form provided to CSUMB by Webcor once the subcontractors were determined, as required by the Design-Build Contract General Conditions.
CONSTRUCTION BID PROCESS

*Risk:*

Lack of an Expanded List of Subcontractors may result in a violation of the Subletting and Subcontracting Fair Practices Act and may be contrary to intended Trustee policy.

*Recommendations:*

2a. In the future, the campus should ensure Design- Builders submit the Expanded List of Subcontractors on the required form in a timely manner.

   (Ownership: CSUMB)

2b. SUAM Section 9800 should be modified to include clear instructions to Campuses on how to administer the requirement of using listed subcontractors for Design-Build contracts.

   (Ownership: CPDC)

*Campus Response:*

2a. Campus Contract Administrator and Project Manager will require the design builder to submit the Expanded List of Subcontractors (form 701.04A) as directed in the Design/Build Contract General Conditions, Part 1A Section 32.05b. (reference SUAM Section X11, 9701.07)

*Management Response:*

2b. We agree that the Campuses need further direction in the administration of subcontractor listing for Design-Build projects. We have provided clarification to SUAM Sections 9774, Evaluation of Bids and Award of Contract, and 9822, Use of Listed Subcontractors.
CONSTRUCTION CHANGE ORDERS

At the completion of the North Quad Student Housing Phase I Project eleven change orders had been executed. The change orders totaled $2,874,926 resulting in a final contract value of $36,833,306.

KPMG performed testing on selective change orders. The change orders were selected to include large dollar line items, credit items, and represent a variety of subcontractors. Overall, the change orders appeared to be in good order, were maintained in a central location, and were fully accessible to KPMG during our field visit.

The following chart indicates the value and days added due to each change order:

<table>
<thead>
<tr>
<th>CO</th>
<th>Description</th>
<th>Added Amount</th>
<th>Credit Amount</th>
<th>Total</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parking lot, hydronic heating</td>
<td>$2,073,722</td>
<td>$</td>
<td>$2,073,722</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Demolition</td>
<td>62,867</td>
<td>(60,843)</td>
<td>2,024</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Water line, food prep. area</td>
<td>78,116</td>
<td>(68,169)</td>
<td>9,947</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Central plant</td>
<td>577,468</td>
<td>-</td>
<td>577,468</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Site lighting, furniture</td>
<td>46,659</td>
<td>(169,319)</td>
<td>(122,660)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Telecom, paint</td>
<td>102,799</td>
<td>(24,614)</td>
<td>78,185</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Beneficial Occupancy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>ADA Ramp</td>
<td>137,916</td>
<td>(43,831)</td>
<td>94,085</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Drainage, telecom</td>
<td>86,990</td>
<td>-</td>
<td>86,990</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tree credit, wireless access, misc.</td>
<td>118,336</td>
<td>(43,171)</td>
<td>75,165</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Global settlement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$3,284,873</td>
<td>(409,947)</td>
<td>$2,874,926</td>
<td>62</td>
</tr>
</tbody>
</table>

Original Contract $33,958,380
Total Revised Contract Value $36,833,306

The use of the CSU Contractor Change Order Request Summary form was not a consistent practice over the course of the project. This form provides a method to correctly calculate the amount of mark-up a contractor charges on a change order by requiring a breakdown of subcontractor costs then calculating the allowed contractor mark-up. However, CSUMB corrected this shortcoming and began using the form late 2004. An adjustment for previously miscalculated mark-up was provided on Change Order #10.

Observation:

Not all change orders contained the CSU Contractor Change Order Request Summary form. This form forces the contractor to break out the mark-up of the Subcontractor amounts and helps the contractor calculate mark-up correctly.
CONSTRUCTION CHANGE ORDERS

Risk:

CSU may be overpaying due to mark-up being charged on mark-up. Many subcontractors submit a lump sum quote to the contractor without breaking out the mark-up on the quote. If the contractor simply uses the lump sum amount to calculate markup, then CSU may be overcharged.

Recommendation:

3. In the future, require the CSU Contractor Change Order Request Summary form to be correctly completed by the Contractor prior to execution.

(Ownership: CSUMB)

Campus Response:

3. Campus has developed a package of sample forms to be given to the contractor at the project preconstruction meeting. This package includes the Change Order Request Summary form. In addition, campus will assist Contractor in the initial submittal for correctness and completion.

KPMG performed mark-up testing on a judgmental sample of ten change order requests (“COR’s”) and recalculated the total change order value including mark-up. KPMG found apparent errors in the mark-up calculation where a COR contained a credit line item. Per SUAM, a deduction for mark-up is supposed to be taken for both subcontractor and general contractor respectively for a credit change. The matrix below reflects the variances in the total COR value for which CSUMB did not make any correction on Change Order #10.

<table>
<thead>
<tr>
<th>COR#</th>
<th>CO#</th>
<th>Amount</th>
<th>Apparent Overcharge</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>1,739,639</td>
<td>26,456</td>
<td>No mark-up adjustment was calculated on a credit for electrical work</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>(100,000)</td>
<td>5,660</td>
<td>No mark-up adjustment was calculated on credit for fire alarm work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Total</strong> $32,116</td>
</tr>
</tbody>
</table>

Observation:

The contractor did not consistently calculate mark-up per the requirements in SUAM. CSUMB did not always correct the contractor’s mark-up calculation on deductive changes.
CONSTRUCTION CHANGE ORDERS

Risk:

Incorrect calculation of a change order mark-up may lead to CSUMB overpayment.

Recommendations:

4a. CSUMB should determine whether recovery of the inaccurately calculated changes is permissible and re-calculate mark-up on change orders containing large subcontractor amounts or credits.

(Ownership: CSUMB)

4b. In the future, CSUMB should verify the general contractor’s mark-up calculation for deductive changes against requirements set forth in SUAM.

(Ownership: CSUMB)

Campus Responses:

4a. We have reviewed all the change orders and re-calculated mark-up on each change order based on the requirements in SUAM and the CSU Contractor Change Order Request Summary form. We conclude that the total mark-up charge for the project is permissible. The mark-up recalculation will be documented in the project file for future reference.

4b. Campus Project Manager will verify GC’s mark-up calculation for deductive changes against requirements set forth in SUAM and be confirmed by Budget Analyst. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.

The change order packages made available for KPMG’s review were not 100% complete. Some of the supporting documentation for the COR’s tested was missing or otherwise limited. As a result, KPMG calculated the variances above based on the information available. COR #16 for example, did not contain any supporting information from the subcontractor. The approved amount for this COR did not separately list any mark-up on the face of the COR.

KPMG requested additional support for thirteen different line items for which the original change order did not contain information detailed enough to support the amounts presented. In some cases the documentation was a handwritten note for an amount larger than the amount supported in the change order. In other cases where a negotiation occurred, there was no documentation of the negotiated amount except for the amount listed in the change order.
Observation:

At times, supporting change order documentation was missing or otherwise limited.

Risk:

CSUMB may be at risk of overpaying for change order work if detailed quotes and supporting cost documentation is missing or not properly evaluated. In addition, CSUMB may not be able to establish the basis for the COR pricing and scope of work at a later date. This may be important in a dispute situation.

Recommendation:

5. In the future, CSUMB should include sufficient supporting documentation with each executed change order. It should be possible for an outside party to determine the basis for the cost and the scope of work agreed to in the COR.

(Ownership: CSUMB)

Campus Response:

5. Campus Project Manager will include sufficient supporting documentation with each executed change order. When necessary, Campus will utilize outside consultants to help determine the basis for the cost and scope of work agreed to in the COR. Signature authority will be based on the absolute amount of individual change order line items as recommended. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.

KPMG tested all change orders for proper signature authority. All eleven change orders contained proper signatures. However, six of the eleven tested change orders required an aggregate calculation of COR’s to arrive at the correct level of signature authority. Change orders containing multiple COR’s of both negative and positive amounts may result in a net change order amount requiring a lower signature authorization than what would have been the case had the change order been calculated based on absolute amounts.

Observation:

The change order signature requirement is based on the net change order amount.
CONSTRUCTION CHANGE ORDERS

Risk:

An individual with a relatively low signature authority can potentially authorize an unlimited dollar amount of change orders if there is a large enough credit on the change order in addition to the additive amounts.

Recommendation:

6. In the future, consider using an absolute amount of individual change order line items to arrive at the correct level of signature authority required to execute the change order.

(Ownership: CPDC)

Management Response:

6. We agree. The change order procedure has been modified, and is posted on the CPDC web site in SUAM, Appendix D. We will cover the change in our training session in October, 2006.

In a field visit to Webcor, KPMG evaluated a sample of change orders and traced subcontractor estimates to the actual subcontractor change orders and payments. No evidence of inappropriate billings was discovered.

Change Order Report Analysis

The University provided a change order log that reflected the initiating source of each change order. The following table summarizes this data:

<table>
<thead>
<tr>
<th>Class</th>
<th>Type of Change</th>
<th>Amount</th>
<th>% of Total CO</th>
<th>% of Original Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Error in or omission from the contract documents</td>
<td>$ -</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>4.2</td>
<td>Unforeseeable job site condition</td>
<td>$149,899</td>
<td>5.21%</td>
<td>0.44%</td>
</tr>
<tr>
<td>4.3</td>
<td>Change in the requirements of a regulatory agency</td>
<td>$118,700</td>
<td>4.13%</td>
<td>0.35%</td>
</tr>
<tr>
<td>4.4</td>
<td>Change originated by the University</td>
<td>$657,468</td>
<td>22.87%</td>
<td>1.94%</td>
</tr>
<tr>
<td>4.5</td>
<td>Changes in specified work due to the unavailability of specified materials</td>
<td>$2,606,327</td>
<td>90.66%</td>
<td>7.68%</td>
</tr>
<tr>
<td>4.6</td>
<td>Other</td>
<td>$ -</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total Change Orders</strong></td>
<td><strong>$2,874,926</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>8.47%</strong></td>
<td></td>
</tr>
<tr>
<td>Original Contract Amount</td>
<td>$33,958,380</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$36,833,306</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONSTRUCTION CHANGE ORDERS

While changes in specified work due to the unavailability of specified materials appears as a high percentage, the overall amount is within tolerable limits.

**Recommendation:**

None

**Labor and Fringe Burden**

The majority of the change order work was performed by subcontractors or vendors. Only minor patching, modifications, and finishing work was self-performed by Webcor. As such, the risk for change order cost overruns on labor and fringe burden by the Contactor’s own forces is not significant and detail testing of burden was not performed.

**Recommendation:**

None
PROJECT MANAGEMENT INSPECTION SERVICES

Douglas E. Barnhart, Inc. provided independent project management inspection services on the North Quad Student Housing Phase I project. The scope of their work included pre-construction / design phase management services, construction management services, and project inspection. A change order was issued to allow full time project management an inspection services for the duration of the project.

The contractual agreement between the Trustees of the California State University and Douglas E. Barnhart, Inc. for a not-to-exceed amount of $100,000 was signed into effect on May 7, 2003 and contains an effective date of March 19, 2003. Douglas E. Barnhart invoiced for $2,070 for the period ending April 30, 2003 indicating that a small amount of work was being performed and invoiced before the contract was fully executed. Additional inspection services were performed by other consultants for approximately $170,563.

Observation:

Work was being performed by the project management consultant before the contract was fully executed.

Risk:

Allowing work to begin on a project before a contract has been signed into effect exposes CSU to contractual risk.

Recommendation:

See Recommendation 1.

(Ownership: CSUMB)

The amount provided for in the original contract was exhausted by invoices through December 31, 2003. The original contract was based on a part-time inspector. One change order was issued adding to the original contract in the amount of $72,000 allowing Douglas E. Barnhart, Inc. to provide full time lead project management and full time inspection services for the remainder of the project with a completion date set for July 31, 2004.
MAJOR EQUIPMENT/MATERIALS REVIEW

The North Quad Student Housing was an active building at the time of KPMG’s review and as a result, equipment and materials for review was selected partially based on accessibility in order not to disturb the tenants.

CSUMB allowed full and complete access to drawings, specifications and submittals, including revisions, which were organized in a fashion easy to locate and contained all sufficient information. The equipment was verified in the field against performance specifications, submittals, and drawings available.

The following equipment items and specific model data were visually confirmed as installed on the project:

<table>
<thead>
<tr>
<th>Division</th>
<th>Drawing No.</th>
<th>Brand</th>
<th>Model No./ Capacity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15000</td>
<td>M0.2</td>
<td>RITE</td>
<td>A750WGE 7.5M</td>
<td>Boilers B-1, B-2</td>
</tr>
<tr>
<td>16470</td>
<td>E0.05A</td>
<td>SIEMENS</td>
<td>600A 480/270V AIC-42KAIC</td>
<td>Electrical Panel</td>
</tr>
<tr>
<td>16470</td>
<td>E0.05A</td>
<td>SIEMENS</td>
<td>600A 208/120V AIC-22KAIC</td>
<td>Electrical Panel</td>
</tr>
<tr>
<td>16000</td>
<td>E0.05</td>
<td>RSE - SIERN</td>
<td>2000A 480/277 Volts</td>
<td>Primary Switches BLDG-302</td>
</tr>
<tr>
<td>Division 3</td>
<td>Various</td>
<td>Maxxon</td>
<td>001-03500-0</td>
<td>GypCrete</td>
</tr>
<tr>
<td>14240</td>
<td>Various</td>
<td>OTIS</td>
<td>AAA21241U / 2500 lbs min. 100 fps</td>
<td>Hydraulic Elevator</td>
</tr>
<tr>
<td>n/a</td>
<td>n/a</td>
<td>University Loft Co.</td>
<td>50536KD-10 / 60 &quot;Lx36&quot;Wx30&quot;H</td>
<td>Natural Laminate Top</td>
</tr>
<tr>
<td>09510</td>
<td>A9.02</td>
<td>Armstrong</td>
<td>Dune Second Look</td>
<td>Ceiling tiles</td>
</tr>
</tbody>
</table>

The equipment and materials selected conformed to the specifications above, based on a visual inspection of equipment labeling.

Recommendation:

None
CLOSE-OUT PROCESS

KPMG verified the project close out requirements established by the contract General Conditions and SUAM. The CSU standard close-out check list was used by the University and completed on December 2, 2005. KPMG reviewed Certificate of Completion, Certificate of Occupancy, punch list, operating permits, O & M manuals, warranties, as-built drawings, the State Fire Marshall inspection report, and other relevant project close out documentation, which was filed and retained properly at the University.

It was noted by KPMG that the final report from D&M Consulting Engineers, Inc. was pending as of the date of KPMG review. This report did not adversely affect the normal close-out procedures with the Contractor.

A CPDC Post Project Performance Review has been completed for this project.

Recommendation:

None
LIQUIDATED DAMAGES

The Contract established August 1, 2004 as the date beneficial occupancy must be obtained and all work to be completed 180 days after plan check to avoid liquidated damages with the exception of the addition of days allowed by the contract. Through the change order process, 62 additional days were added to the project completion schedule. The State Fire Marshal issued the Certificate of Occupancy on August 4, 2004, and the Notice of Completion was issued by CSU on September 27, 2004. Since the Contractor completed the project and the University took beneficial occupancy ahead of schedule, liquidated damages were not warranted.

Recommendation:

None
KPMG reviewed the accounting process for the project. CSUMB provided an excel spreadsheet containing complete payment information, budget comparisons, tracking of change orders, committed costs, the 2-7 Capital Outlay Estimate, and a Capital Expenditure Summary. This spreadsheet was referenced during invoice and change order testing and no discrepancies were of note.

Recommendation:

None
September 1, 2006

Mr. Larry Mandel
University Auditor
The California State University
401 Golden Shore, 4th Floor
Long Beach, California 90802

Subject: Revised Campus Response to Recommendations:
KPMG Audit Report
North Quad Student Housing Phase I
Design Build Project

Dear Larry:

Attached please find the revised response to Recommendations 1, 2a and 3 through 5 for
the subject audit report.

Should you have any questions or comments, please direct them to Niraj Dangoria,
Associate Vice President of Campus Development and Operations at 831.582.4766. In
his absence you may also contact Ron Deller, Lead Construction Manager at
831.582.5099.

Sincerely,

Dan Johnson
Vice President of Administration and Finance

Cc: Dianne Harrison

:It

attachment
CONSTRUCTION PROJECT EVALUATION
CALIFORNIA STATE UNIVERSITY, MONTEREY BAY
NORTH QUAD STUDENT HOUSING PHASE 1 PROJECT

DESIGN BUILD PROCESS

Recommendations:

1. As a better practice, sufficient contractual agreements should be signed and effective before any work commences on a project.

   (Ownership: CSUMB)

2a. In the future, the campus should ensure Design-Builders submit the Expanded List of Subcontractors on the required form in a timely manner.

   (Ownership: CSUMB)

Campus Responses:

1. Campus concurs and will make certain that contractual agreements be fully executed prior to a Notice to Proceed letter being issued to the Contractor. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.

2a. Campus Contract Administrator and Project Manager will require the design builder to submit the Expanded List of Subcontractors (form 701.04A) as directed in the Design/Build Contract General Conditions, Part 1A Section 32.05b. (reference SUAM Section X11, 9701.07)
CONSTRUCTION CHANGE ORDERS

Recommendations:

3. In the future, require the CSU Contractor Change Order Request Summary form to be correctly completed by the Contractor prior to execution.

(Ownership: CSUMB)

4a. CSUMB should determine whether recovery of the inaccurately calculated changes is permissible and re-calculate mark-up on change orders containing large subcontractor amounts or credits.

(Ownership: CSUMB)

4b. In the future, CSUMB should verify the general contractor’s mark-up calculation for deductive changes against requirements set forth in SUAM.

(Ownership: CSUMB)

5. In the future, CSUMB should include sufficient supporting documentation with each executed change order. It should be possible for an outside party to determine the basis for the cost and the scope of work agreed to in the COR.

(Ownership: CSUMB)

Campus Responses:

3. Campus has developed a package of sample forms to be given to the Contractor at the project preconstruction meeting. This package includes the Change Order Request Summary form. In addition, the Campus will assist the Contractor in the initial submittal for correctness and completion.

4a. We have reviewed all the change orders and re-calculated mark-up on each change order based on the requirements in SUAM and the CSU Contractor Change Order Request Summary form. We conclude that the total mark-up charge for the project is permissible. The mark-up recalculation will be documented in the project file for future reference.

4b. The Campus Project Manager will verify the GC’s mark-up calculation for deductive changes against requirements set forth in SUAM and be confirmed by the Budget Analyst. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.
5. The Campus Project Manager will include sufficient supporting documentation with each executed change order. When necessary, the Campus will utilize outside consultants to help determine the basis for the cost and scope of work agreed to in the COR. Signature authority will be based on the absolute amount of individual change order line items as recommended. The Operational Plan for Delegation of Capital Outlay Management Authority will be amended to reflect this change.
PROJECT MANAGEMENT INSPECTION SERVICES

Recommendation:

See Recommendation 1.

(Ownership: CSUMB)

Campus Response:

The Campus concurs and will make certain that contractual agreements be fully executed prior to a Notice to Proceed letter be issued to the Contractor.
MEMORANDUM

Date: June 30, 2006

To: Mr. Larry Mandel
   University Auditor
   Office of University Auditor

From: Richard P. West
   Executive Vice Chancellor
   and Chief Financial Officer

Subject: Audit Report
   North Quad Student Housing, Phase I
   California State University, Monterey Bay

I am pleased that the overall theme of this audit report continues in a positive vein and that it finds general compliance with established procedures. I have reviewed the report’s findings with my Capital Planning, Design and Construction (CPDC) staff, and have attached our response to the auditors’ findings and recommendation to CPDC.

RPW:JRC:bn

Attachments

cc: Ms. Elvyra F. San Juan
    Mr. Larry Piper
    Mr. Thomas M. Kennedy
    Mr. James R. Corsar
CONSTRUCTION BID PROCESS

Recommendation:

2b. SUAM Section 9800 should be modified to include clear instructions to Campuses on how to administer the requirement of using listed subcontractors for Design-Build contracts.

(Ownership: CPDC)

Management Response:

2b. We agree that the Campuses need further direction in the administration of subcontractor listing for Design-Build projects. We have provided clarification to SUAM Sections 9774, Evaluation of Bids and Award of Contract, and 9822, Use of Listed Subcontractors.

CONSTRUCTION CHANGE ORDERS

Recommendation:

6. In the future, consider use an absolute amount of individual change order line items to arrive at the correct level of signature authority required to execute the change order.

(Ownership: CPDC)

Management Response:

6. We agree. The change order procedure has been modified, and is posted on the CPDC web site in SUAM, Appendix D. We will cover the change in our training session in October, 2006.
September 28, 2006

MEMORANDUM

TO: Mr. Larry Mandel
   University Auditor

FROM: Charles B. Reed
       Chancellor

SUBJECT: KPMG Draft Final Report on the North Quad Student Housing Phase I Construction Project at California State University, Monterey Bay

In response to your memorandum of September 28, 2006, I accept the response as submitted with the draft final report on the North Quad Student Housing Phase I construction project at California State University, Monterey Bay.

CBR/amd

Enclosure

cc: Ms. Erika Alvord, KPMG
    Mr. Dan Johnson, Vice President, Administration and Finance, CSU Monterey Bay
    Mr. Dennis Hordyk, Assistant Vice Chancellor, Financial Services
    Ms. Elvyra San Juan, Assistant Vice Chancellor, CPDC
    Dr. Dianne F. Harrison, President
    Mr. Richard P. West, Executive Vice Chancellor and Chief Financial Officer