Audit of Restoration of Correctional Facilities, Buildings D, E and F

Report by the Office of County Comptroller

Martha O. Haynie, CPA County Comptroller

County Audit Division

J. Carl Smith, CPA Director

Christopher J. Dawkins, CPA
Deputy Director

Glenn R. Tingling, CPA, Audit Supervisor In-Charge Auditor

Edward Brennan, CIA, Audit Supervisor Dexter J. Watts, Senior Auditor

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December 11, 2001

Richard T. Crotty, County Chairman And Board of County Commissioners

We have conducted an audit of the Restoration of Correctional Facilities, Buildings D, E and F. The audit was limited to a review of the contract, the contract award process, contract administration and compliance and certain other related matters. The initial period of the audit was January 1, 1999 through February 29, 2000. We also reviewed certain transactions up to June 7, 2000. The audit fieldwork was completed on December 11, 2000. Our audit was conducted in accordance with generally accepted government auditing standards and included such tests, as we considered necessary in the circumstances.

Responses to our Recommendations for Improvement were received from the Purchasing and Contracts Division and the Department of Capital Projects and are incorporated herein.

Martha O. Haynie, CPA County Comptroller

c: Ajit M. Lalchandani, County Administrator Tom Weinberg, Deputy County Administrator Tony Aguerrevere, Manager, Department of Capital Projects Johnny M. Richardson, Manager, Purchasing and Contracts Division



Executive Summary

We have conducted an audit of the Restoration of Correctional Facilities, Buildings, D, E and F. The restoration was performed under a lump sum contract of \$11,917,000 that was increased by approximately eleven percent to \$13,221,143. The audit was limited to a review of the contract, the contract award process, contract administration and compliance and certain other related matters. Based upon the work performed, the County complied with applicable procurement laws and regulations. Further, the County and the Contractor substantially complied with the material provisions of the contract. However, in our opinion, the system of internal controls over contract administration and purchasing were not adequate because of the following:

The County could not provide any documentation to support the \$12 million estimated cost that was published in the Notice of Invitation for Bid for the three buildings. Such documentation is needed to ensure the final bid prices are fair and reasonable.

Mobilization costs may have been substantially overstated. Contract documents did not include a definition, or a description of mobilization costs and allowed a line item for mobilization up to two percent of the total contract of \$11,917,000. The contract did not require documentation to support the mobilization charges.

The County did not use direct purchases to acquire any of the materials used on the project. Since approximately eight million dollars of the \$11,917,000 contract was for materials, approximately \$480,000 represented payment of sales taxes. While direct purchases would have been economical for only large purchases, it appears that opportunities for tax savings of at least \$148,000 were lost to the County.

The County could have overpaid the Contractor up to \$24,507 for change orders. Changed work was also performed without prior approval from the Purchasing and Contracts Division and the Board.

The Capital Projects Department authorized the commencement of work (costing \$335,400) four months before seeking authorization from the Board. The County also paid an additional \$21,400 for overhead and profit as a result of the scope of work being handled as a separate purchase order instead of a change order. In addition, certain aspects of the scope of work for the repairs to the roof membrane and roof demolition may have been duplicated.

The audit clauses in the contracts with the Consulting Engineers and the primary contractor require updating to include flow-down of requirements to

payees, material suppliers, subcontractors, sub-subcontractors and to cover audit resolution issues such as reimbursements of overpayments, overcharges, and audit costs.

The change order clause in the contract requires strengthening to assist the County in negotiating the pricing of change orders. Notable weaknesses in the change order clause were the absence of provisions for reducing, using a sliding scale, markups on large change orders, the handling of small tools and expendables, and specifying the composition of actual labor burden.

There was no detailed itemized listing of the materials stored at the site, no receiving report or other documentation to show that the materials were received at the site, and no invoices to support \$364,335 (40 percent) of materials reported to be stored on site.

The Contractor did not reimburse the County for the cost of electricity that it consumed during the renovation of Building D. Also, no meters were installed to measure the amount of electricity consumed. In addition, the Project Manager entered into a verbal agreement that allowed the Contractor to use County electric power free-of-charge in exchange for certain services.

Bidders were not required to break down their bids by the various cost components of the project. Instead, they presented their bids as a lump sum total. More detailed bid data could enable the County to identify possible mistakes in bids that, if corrected, could result in a different bidder becoming the low bidder or prevent a bidder from winning a job with a significant error in their bid proposal that could eventually cost the County more money.

Of the 34 recommendations made in this audit, management concurred or partially concurred with twenty-two and did not concur with twelve. As shown by the above, there were opportunities for savings that were not achieved. However, if recommended actions are taken, we believe the County can realize significant savings on future contracts.



	MAN	AGEMENT RESP	ONSE		IMPLEMENTATION STATUS	
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
1.	X			Х		We recommend that estimated costs of construction projects are adequately supported. Such support should include written independent comprehensive and detailed cost estimates which should be retained and also used to evaluate lump sum bids and proposed prices for change orders.
2.						We recommend the Purchasing and Contracts Division ensures that whenever the IFB requires a specific line item in the bid for mobilization, the contract includes the following:
A)			Х			A definition of mobilization and its cost elements to the extent practical.
В)			Х			A stipulation that the Contractor must retain adequate documentation to support actual mobilization costs.
C)			X			A provision that the County has the option of verifying the reasonableness of actual mobilization costs and adjusting the contract price to reflect the actual cost of mobilization.

	MAN	AGEMENT RESP	ONSE	IMPLEMEN STAT		RECOMMENDATIONS
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
3.	X				X	We recommend the Purchasing and Contracts Division works with the Department of Capital Projects to develop written guidelines for the use of direct purchases. Such guidelines should indicate when direct purchases are appropriate, require the incorporation of a direct purchase clause in applicable contracts and be incorporated in the Divisions' operating manuals.
4.	Х				X	We recommend that the Purchasing and Contracts Division establishes a written policy for the charging of fees for bid documents including a statement of any organizations that are exempt from such fees.
5.			X			We recommend the Purchasing and Contracts Division considers establishing a written policy requiring lump sum bidders to submit a detailed breakdown of their bids to show the individual cost components such as electrical, heating and air conditioning, plumbing, roofing and other types of work as applicable.
6.	Х			Х		We recommend the Purchasing and Contracts Division ensures that contractor's certificates of insurance are obtained and properly filed on a timely basis.

	MAN	AGEMENT RESP	ONSE	IMPLEMEN STAT		RECOMMENDATIONS	
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS	
7.	X			Х		We recommend the Purchasing and Contracts Division and the Department of Capital Projects work together to determine a consistent approach for the handling of payment and performance bonds for increased work due to change orders. Written guidelines should then be prepared and incorporated in the Divisions' operating manuals.	
8.	X			X		We recommend the Purchasing and Contracts Division establishes written guidelines for the referral of contract documents to the County attorney for legal review. Such guidelines should state when a contract should be referred. The scope of work and dollar commitment of the County could be part of the criteria. Also, the written guidelines should prescribe periodic legal review of the boilerplate for IFB instructions and other contract documents.	
9.	Х				Х	We recommend that the Purchasing and Contracts Division works with the Department of Capital Projects to develop a more comprehensive audit clause for construction contracts.	

	MAN	MANAGEMENT RESPONSE			NTATION TUS	RECOMMENDATIONS
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
10.						We recommend that the language in change order clauses be enhanced to reflect the following:
A)			Х			The maximum markup percentage for general administration, overhead, and profit is reduced, on a sliding scale, relative to the cost of the change order for high dollar amounts.
B)			X			The cost of small tools and expendables be specified or included in the markup for general administration, overhead, and profit.
C)			Х			The labor burden is defined as the Contractor's net actual cost after considering payroll tax (FUTA and SUTA) limits, premium discounts, rebates and other appropriate reductions.
D)			X¹			Material costs reflect the Contractor's reasonably anticipated net actual cost after consideration of trade discounts and volume rebates.

¹ No response was given by management.

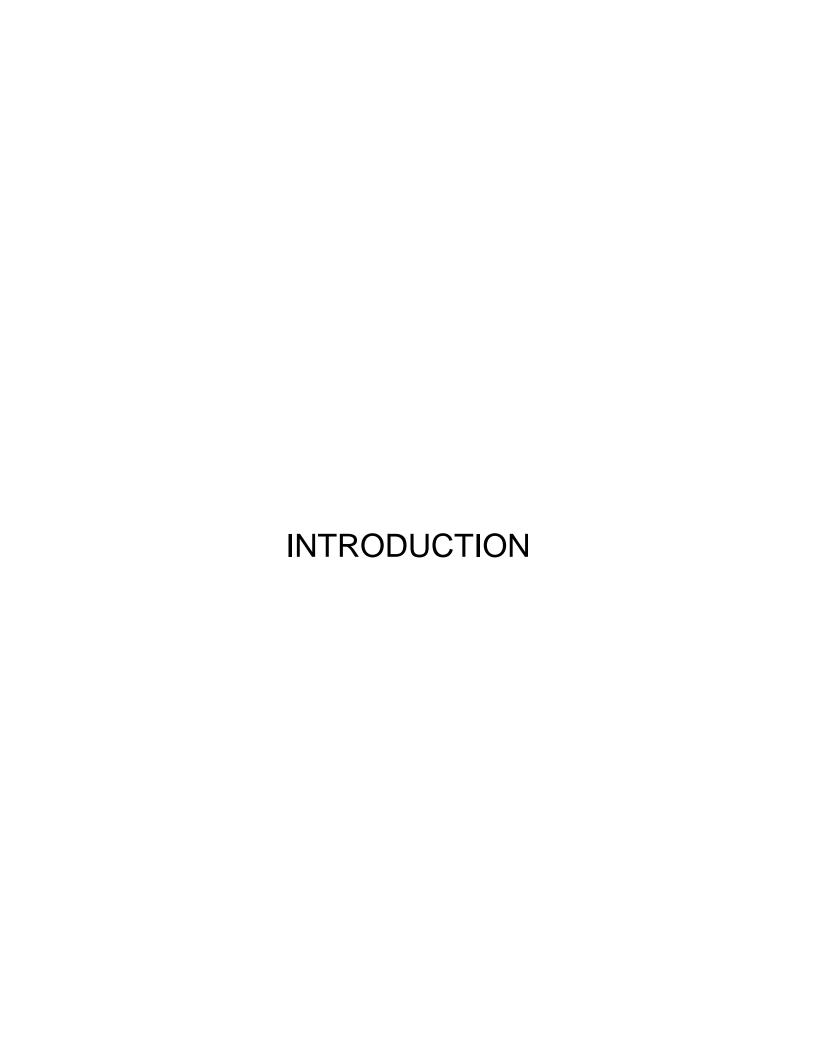
	MANAGEMENT RESPONSE		IMPLEMEN STAT		RECOMMENDATIONS	
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
11.						We recommend the following:
A)		X			X	The Department of Capital Projects with assistance from the Consulting Engineers perform a detailed comprehensive analysis of the pricing of change orders to ensure that pricing is reasonable and in conformance with the contract provisions. Any computation errors detected should be corrected retroactively.
В)		Х		Х		The Department of Capital Projects reviews the possible overpayments and requests a credit from the Contractor for the amount determined to be excessive payments.
12.			X			We recommend the Department of Capital Projects ensures that sufficient documentation to support change orders is obtained and reviewed prior to agreeing to a change in the contract amount and then properly filed.
13.						We recommend the following:
A)	X				X	The Department of Capital Projects works with the Purchasing and Contracts Division to speed up the approval process so that formal change orders showing pricing and scope of work are approved and issued prior to the commencement of changed work.

	MAN	MANAGEMENT RESPONSE IMPLEMENTATION STATUS RECOMMENDATIONS		DECOMMENDATIONS		
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
13. B)	X				X	Consideration be given to amending the approval process so that approval of funds can be requested from the Board based on estimates of pending change orders in order to eliminate the possibility of halting construction while awaiting approval. This would also prevent frequent requests to the Board for approval of changes involving small amounts.
C)	X				X	In those unusual cases that meet emergency criteria where prior approval is not possible, the Department of Capital Projects' Project Manager should prepare a memo for the file detailing the scope of work, the agreed price, and why it was necessary to proceed without an approved changed order. This information should be provided to the Purchasing and Contracts Division and the Board, as applicable, when formal approval is requested.
14.						We recommend the following:
A)		X			X	The Department of Capital Projects should not issue notice to proceed to contractors for work that needs to be approved by the Board prior to obtaining Board approval.

	MAN	AGEMENT RESP	ONSE	IMPLEMEN STAT		RECOMMENDATIONS	
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS	
14. B)			Х			The Department of Capital Projects should consider the additional payment of \$21,400 to the subcontractor in its negotiations with the Contractor for credit refunds.	
15.						We recommend the following:	
A)	X			Х		In situations where additional contracts are given for work on a project, a comparison of the scope of work covered by the contracts should be performed to eliminate possible duplication.	
В)		Х		X		The Department of Capital Projects should meet with the Contractor and request a refund for any overpayments made as a result of the duplication of scope.	
16.	Х				Х	We recommend the Department of Capital Projects ensures compliance with the terms of the contract for retainage.	
17.		Х			Х	We recommend that the Department of Capital Projects ensures that the Contractor complies with the terms of the contract and provides adequate supporting documents for materials stored on site before approving applications for payment.	

	MAN	AGEMENT RESP	ONSE	IMPLEMEN STAT		RECOMMENDATIONS
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS
18.						We recommend the following:
A)	X			X		For future Consulting Engineering contracts, the method of progress payments (with respect to inspection and technical services relating to construction work performed) should not be based upon the amount of construction work that is completed and approved. Instead, payments should be based upon the performance of the Consultant.
В)	Х			Х		Any changes made to the method of payment specified in a contract should be done only through a written amendment to the contract.
19.						We Recommend the following:
A)		Х		X		The Department of Capital Projects enters into negotiations with the Contractor with a view to recovering some of the costs of the electricity that it used.
В)		X			X	The Department of Capital Projects refrains from entering into verbal agreements for tradeoffs with Contractors and complies with contract requirements to use written change orders.

	MAN	AGEMENT RESP	ONSE	IMPLEMEN STAT		DECOMMENDATIONS	
NO.	CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED	RECOMMENDATIONS	
20.			X			We recommend contract language be improved to ensure that the County's ownership of salvageable materials is explicitly stated.	
21.			Х			We recommend the Department of Capital Projects ensures that all applicable warranties are processed promptly after work is completed.	
22.	X			X		We recommend that the Business Development Division ensures that all purchase orders and contracts issued to M/WBE subcontractors by prime Contractors are signed by the prime Contractors.	



INTRODUCTION



Background

The County awarded a lump sum construction contract for \$11,917,000 to Sauer Inc. (Contractor) on July 29, 1998 for the Restoration of Correctional Facilities, Buildings D, E and F. The project was competitively bid. Only two bids were received and Contractor was the lowest bidder. The notice to proceed was dated August 17, 1998. Substantial completion for all three buildings was achieved on November 16, 2000. The contract price increased by approximately eleven percent to \$13,221,143 due to change orders.

The contract prescribes that the Contractor shall perform all the work required by the contract documents for the proper execution and completion of Orange County Corrections Restoration of Buildings D, E, and F in full accordance with the drawings and as elaborated in the specifications of Invitation for Bid No. Y8-739-CT, dated February 2, 1998.

The scope of work consists of the following:

- The replacement of the domestic water piping;
- Removal and replacement of the fire sprinkler heads and piping;
- Removal and replacement of air conditioning equipment and ductwork;
- Reconditioning of all existing electrical panels;
- Reusing and creating new roof penetrations and installing a new lightning protection system;
- Constructing plaster soffits and CMU chasers;
- Reconditioning security hardware and equipment;
- Refinishing floors;
- · Removing and re-installing acoustical tile; and
- Painting interior surfaces.

The work covered by this contract was originally planned to be part of a major project for the restoration of six buildings at the thirty-third Street complex: Buildings A, B, the Central Energy Plant (CEP), D, E, and F. However, due to funding constraints, the restoration was split into two contracts. Buildings A, B, and the CEP were restored first under contract No. Y6-753 issued to Contractor dated October 11, 1996 for \$3,601,000. Work on Buildings D, E, and F, was

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subsequently authorized under the contract that is under review.

The Purchasing and Contracts Division (with input from the Department of Capital Projects) was responsible for the contract award process. The Department of Capital Projects was responsible for the administration of the contract, contract compliance and oversight of construction activities. This was achieved primarily by the Project Manager, an employee of the Department of Capital Projects.

Scope, Objectives, and Methodology

The audit scope included a limited review of the contract, contract award process, contract administration and compliance and certain related matters. The initial period of the audit was January 1, 1999 through February 29, 2000. We also reviewed certain transactions up to June 7, 2000. The audit fieldwork was completed on December 11, 2000. The objectives of our review were as follows:

- To determine whether the County complied with laws and regulations in the invitation for bid (IFB) and contract award process;
- 2. To determine whether the Contractor complied with terms of the contract:
- 3. To determine whether the County adequately monitored construction activities;
- 4. To determine whether contract expenditures were billed in accordance with contract terms;
- 5. To determine whether change orders were properly priced and authorized, and did not duplicate work already included in the scope of the contract; and
- 6. To determine whether M/WBE requirements were met.

To determine whether the County complied with laws and regulations in the IFB and contract award process, we reviewed the contract's award process and approval to determine compliance with the County Ordinance and the Purchasing Manual.

To determine whether the Contractor complied with the terms of the contract, we performed the following:

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- Obtained the official bid form and ensured that the contract was prepared for the correct amount of the bid:
- Evaluated details of the bids for wide variances and ensured that the successful bidder provided the required attachments to its bid package;
- c. Verified that applicable licenses/permits were provided and were current; and,
- d. Verified that the Contractor prepared project closeout manuals for buildings completed.

To determine whether the County adequately monitored construction activities, we reviewed documented monitoring activities, invoices, and contract provisions.

To determine whether contract expenditures were billed in accordance with contract terms, we reviewed the schedule of values to ensure that the sum of all values equals the total amount of contract and change orders. We also reconciled the payments to ensure they were in accordance with the contact terms and evaluated whether the project made use of direct purchases to reduce the payment of sales taxes.

To determine whether change orders were properly priced and authorized, and did not duplicate work already included in the scope of the contract, we prepared a control schedule of the change orders and reviewed a sample.

To determine whether M/WBE requirements were met, we verified that

- The Contractor met the required M/WBE goals or provided adequate evidence of a "Good Faith Effort" and
- The executed subcontracts/purchase orders and the Contractor's monthly workforce reports were filed with the Business Development Division in accordance with contract requirements.

Overall Evaluation

Based upon the work performed, the County complied with applicable procurement laws and regulations. Further, the

INTRODUCTION



County and the Contractor substantially complied with the material provisions of the contract. However, in our opinion, the system of internal controls, including various policies and procedures, over contract administration and purchasing were not adequate. Recommended improvements are noted herein.



1. The Estimated Cost of Construction Projects Should Be Adequately Supported

Stated estimated project cost should have written support

The County could not provide any documentation to support the \$12 million estimated cost that was published in the Notice of Invitation for Bid for this project. The estimated cost was provided to all interested bidders and may have been a factor in a bidder's price. According to the Manager of the Department of Capital Projects, the former Project Manager may have rounded up a \$10.5 million cost estimate to \$12 million. However, the \$10.5 million estimate was for Buildings A, B, CEP/Laundry, D, E and F. If this cost estimate was rounded up from a figure that included other buildings, the estimate may have been significantly overstated. Estimated costs of construction projects should be adequately supported. Such support should include a comprehensive, detailed estimate of the cost of the project. This document should be retained and also used to evaluate lump sum bids and proposed prices for change orders.

<u>We Recommend</u> that estimated costs of construction projects are adequately supported. Such support should include written independent comprehensive and detailed cost estimates which should be retained and also used to evaluate lump sum bids and proposed prices for change orders.

MANAGEMENT'S RESPONSE:

Concur. We concur with the concept of the auditor's recommendations. We disagree with the findings as cost estimates are performed all the time and this project is no exception. We have had several cost estimates for this project alone since 1995. Cost estimates are formally and professionally performed in all projects of importance managed by the Department of Capital Projects.

Notable cost estimates shared with appropriate parties are \$10.5 million done by April 1995 and \$12 million done by April 1997. This one could not be located. The low responsive bid was \$11,917,000. Supporting the importance of Cost estimates in the management of projects, there are



three specific locations in the standardized filing system for our construction projects PD-80, D-40 & D-45. It was because of these cost estimates that the project was strategically broken into separate buildings and re-bid in 1998. (Not excusing the missing cost estimate obtained by a previous Project Manager the point is well taken).

AUDITOR'S COMMENT:

Although the response states that cost estimates were done and could not be located, the Consulting Engineers reported to have performed the estimate informed us that, "This value represents an escalation of costs based on time for the \$10,542,246" estimate. As stated in our text, this estimate of \$10,542,246 included Buildings A, B, CEP in addition to D, E and F.

2. The Contract Language for Mobilization Should Be Revised

The amount paid by the County for mobilization may have been substantially overstated. In addition, the contract documents did not include a definition, or a description of mobilization costs. The successful bidder included in its bid of \$11.9 million a line item of \$220,000 for mobilization. This represents 1.85 percent of the total bid or just under the two percent allowed by the contract. Regarding this amount, we noted the following:

Contract documents should define mobilization costs

Support for mobilization costs should be available for review

- A) When asked for a definition of what exactly constitutes mobilization costs, the Contractor's on-site representative stated that this was a "gray area" and that different people had different ideas of what constitutes mobilization costs. According to him, generally it is bringing the things you need to the work site to get started on the project. This could be trailers, people, supplies, etc.
- B) The Contractor claimed no supporting documents were available since they were not required to keep such documentation.



- C) The same contractor also performed the earlier renovation to Buildings A, B, and CEP at the same site for \$3.6 million. The schedule of values for this previous contract showed that the cost of mobilization was \$25,000 or only 0.7 percent of the contract amount. However, for the present contract, mobilization was 1.85 percent of the contract amount. It should be noted that the IFB documents for the previous contract did not allow a specified percentage for mobilization costs.
- D) The schedule of values attached to application for payment No. 2 dated September 29, 1998 for the period (September 1, 1998 to September 30, 1998) indicated that the amount scheduled for mobilization was \$75,000 and that said amount represented 100 percent of the mobilization costs. As we noted above, subsequent billings increased the total to \$220,000.

Where the County has decided to request that a specific amount be included in bids for mobilization, contracts should define mobilization. Also, to avoid possible overcharges, the contract should provide a method for the County to ensure the reasonableness of these charges.

<u>We Recommend</u> the Purchasing and Contracts Division ensures that whenever the IFB requires a specific line item in the bid for mobilization, the contract includes the following:

- A) A definition of mobilization and its cost elements to the extent practical.
- B) A stipulation that the Contractor must retain adequate documentation to support actual mobilization costs.
- C) A provision that the County has the option of verifying the reasonableness of actual mobilization costs and adjusting the contract price to reflect the actual cost of mobilization.



MANAGEMENT'S RESPONSE:

- A) Do Not Concur. Mobilization should be defined when it's included as a line item in unit price contracts.
- B) Do Not Concur. Purchasing and Contracts does not concur with requiring support for actual mobilization costs as the award is made on a competitive lump sum basis.
- C) Do Not Concur. Purchasing and Contracts does not concur with reducing a contract to reflect actual mobilization costs. As a competitively bid contract, no provisions are made to reduce the contract price to reflect actual costs of any component of the contract. The competitive process provides the County with assurances that the most fair and reasonable price is obtained, reflecting the current market conditions. Purchasing and Contracts and Capital Projects do not foresee using a line item for mobilization in lump sum contract awards in the future.

AUDITOR'S COMMENT:

Our recommendation addresses this issue because a line item for mobilization was required by the bid documents and included in the bid. The response indicated that a line item for mobilization in lump sum contracts would not be used in the future. We believe this is acceptable.

3. Written Guidelines Should Be Established for the Use of Direct Purchases

The County did not use direct purchases to acquire any of the materials used on the project. Direct purchases should be used to reduce the payment of sales taxes on large purchases where appropriate. The direct purchases process involves the County issuing the purchase orders to vendors for materials to be used on a project after the vendors have



been identified and prices agreed upon by the Contractor. When the purchase order is issued, the contract amount is adjusted down by a credit change order for the corresponding amount.

Based upon the schedule of values, approximately eight million of the original \$11,917,000 contract was for materials. As a result, approximately \$480,000 of the contract represents payment of sales taxes. We would not expect that all materials would be purchased through the direct purchase method. However, this method of acquisition is easily accomplished and beneficial for large purchases. As examples, it appears that the following equipment could have been targeted for direct purchases:

DESCRIPTION OF MATERIALS	AMOUNT
Back up generators, switching gears, electrical duct-bank feeders and controls for the Central	
Energy Plant	\$297,000
Rework of CCTV	304,400
Detention equipment	672,300
DDC system	952,000
Air handling units/equipment	477,360
TOTAL	\$2,703,060

These items alone would have resulted in \$148,668 (\$2,703,060 x 5.5 percent) of net savings (the state of Florida returns a half cent of every six cents of sales tax collected within a county to that county). It appears direct purchases could have been applicable for a significant amount of material and equipment purchases. However, the contract did not address the use of direct purchases. Also, although there are Purchasing and Contracts Division policies that address the procedures utilized when using direct purchases, there were no written guidelines to indicate when direct purchases should be used.

Written guidelines should indicate when direct purchases are appropriate

<u>We Recommend</u> the Purchasing and Contracts Division works with the Department of Capital Projects to develop written guidelines for the use of direct purchases. Such guidelines should indicate when direct purchases are appropriate, require the incorporation of a direct purchase



clause in applicable contracts and be incorporated in the Divisions' operating manuals.

MANAGEMENT'S RESPONSE:

Concur. Purchasing and Contracts will draft a policy for use of direct purchases, however, that policy will not generally recommend direct purchases be used for contracts awarded to general contractors. There is no incentive for the contractor to assist the County with the process as there might be in a Construction Management or Design-Build contract for which the price is negotiated. The process cannot work without the full cooperation and assistance of the builder. When it is anticipated that this program will be used in a General Contracting contract, this requirement will be identified in the solicitation to allow the Contractor to incorporate the cost for the service in their bid.

AUDITOR'S COMMENT:

The issue is not one of incentive to the contractor; but one of savings to the County, and such savings can be achieved with a contract requirement. We disagree with the concept that direct purchases not be used on contracts awarded to general contractors.

4. The Purchasing and Contracts Division Should Establish a Written Policy for the Charging of Fees for Bid Documents

Not all organizations that obtained bid documents, plans and specifications for the Restoration of Correctional Facilities, Buildings D, E and F paid the fee of \$150 for the documents. Certain entities such as Plan Rooms and Builders Exchanges did not pay any fees for the documents. Standard operating practices require a fee to help the County recover its expenses for printing and preparing the bid documents. However, there was no written policy as to who should pay for bid documents and who should get them free. A written policy could help ensure that the County collects all fees due on a consistent basis.

RECOMMENDATIONS FOR IMPROVEMENT



<u>We Recommend</u> that the Purchasing and Contracts Division establishes a written policy for the charging of fees for bid documents including a statement of any organizations that are exempt from such fees.

MANAGEMENT'S RESPONSE:

Concur. Purchasing and Contracts will draft a policy statement for fees charged for bid documents, as well as who receives free bidding documents.

5. Consideration Should Be Given to Requiring Lump Sum Bidders to Submit a Detailed Breakdown of Their Bids to Show the Individual Cost Components

We were informed that bidders are not required to break down their bids by the various cost components of a project. Instead, bidders are asked to present their bids as a lump sum total. For this contract, bidders were asked to present their bids as a total cost for each of the three buildings being restored plus an amount for mobilization costs and two alternative items. Our review of the bids showed a variance between the total amounts bid for the low bidder and the losing bidder (only two bids were received) of \$1,013,000. Significant variances could mean:

- That the scope of work was not clear to the bidders;
- The specifications and drawings were inaccurate;
- There may have been some misunderstanding of the contract documents; or,
- Mathematical mistakes were made in preparing the bids.

In our view, lump sum bids should be broken down to show the various cost components (in this case, by electrical, heating and air conditioning, plumbing, roofing, etc.) in sufficient details to provide analysis and comparison with other bids and with the detailed independent government estimate that should be obtained (as noted in Recommendation for Improvement No. 1) prior to the bid.

Lump sum bids could be broken down to show various cost components

RECOMMENDATIONS FOR IMPROVEMENT



More detailed bid data could enable the County to identify possible mistakes in bids that, if corrected, could result in a different bidder becoming the low bidder or prevent a bidder from winning a job with a significant error in their bid proposal. Also, it is possible that a low bid could be submitted that is in line with other bids implying that there was no mistake in the calculation of the bids. However, a sub-contractor's quote for a particular segment of the work could be too low due to a mistake and offset by a quote that is too high for another cost component. Thus, one subcontractor would obtain additional profits while another would experience a loss on the project.

Although under a competitively bid contract this is the responsibility of the primary contractor, it would not be in the County's best interests to accept a low bid that includes significant mistakes in any of the calculations of the various cost components. This might provide an incentive to perform substandard work in an effort to mitigate losses.

In our view, it should not be a hardship for bidders to provide this information as they already have it in order to prepare their bids. Also, soon after award, the successful bidder submits a breakdown of the contract amount for each category of cost by means of a schedule of values with the first application for a progress payment.

<u>We Recommend</u> the Purchasing and Contracts Division considers establishing a written policy requiring lump sum bidders to submit a detailed breakdown of their bids to show the individual cost components such as electrical, heating and air conditioning, plumbing, roofing and other types of work as applicable.

MANAGEMENT'S RESPONSE:

Do Not Concur. Purchasing and Contracts does not concur with a written breakdown of lump sum pricing as it compromises the County's position when negotiating a schedule of values. In addition, the competitive aspect of the solicitation dictates that the total bid price be used to determine the best value for the project, not a breakdown of



pricing. If the breakdown of pricing indicates an imbalance, that in and of itself would not be a justifiable reason to award to the next bidder; however, the lowest responsible, responsive bid is recommended for award. It is the contractor's responsibility to perform the project for the price proposed. It should also be noted that in a lump sum bid situation, the total bid amount is evaluated to determine the adequacy of the bid. If there is a major deficiency with the low bid, the County estimate and/or other bids, the evaluation process includes bringing this matter to the low bidder's attention and requesting that he/she submit a written confirmation of the bid price and understanding of the Moreover, a technical analysis of all bids is project. performed by the project manager and/or the consultant. These steps have been used on an ongoing basis and contractor performance indicates that they have been successful in ensuring that contracts are awarded to responsible bidders.

AUDITOR'S COMMENT:

The risk of not identifying errors up-front outweighs the risk of compromising negotiation of the subsequent schedule of values. Therefore, we believe that every effort should be made to prevent awarding contracts to a company whose bid may contain significant errors that utimately could cost the County additional money and resources.

6. The Purchasing and Contracts Division Should Ensure Contractor's Certificates of Insurance Are Obtained and Properly Filed on a Timely Basis

A copy of the January 1, 1999 to December 31, 1999 liability insurance certificate for the primary Contractor could not be located by the Purchasing and Contracts Division. Article 8, Insurance Requirements, paragraph A, page F-7 of the Invitation for Bid states that the Contractor shall procure and maintain for the duration of the contract specified amounts of insurance. The Contractor shall file with the County current certificates of all required insurance on forms acceptable to the County. Without the certificate of insurance, there is no



assurance that contractors performing work for the County carry the required insurance coverage.

<u>We Recommend</u> the Purchasing and Contracts Division ensures that contractor's certificates of insurance are obtained and properly filed on a timely basis.

MANAGEMENT'S RESPONSE:

Concur. Purchasing and Contracts maintains an insurance tickler file and will request assistance by Accounts Payable in reviewing insurance prior to interim payment applications.

7. A Consistent Approach for the Handling of Payment and Performance Bonds to Cover Change Orders Should Be Determined

The County paid the Contractor \$4,780 for premiums on payment and performance bonds for change orders Nos. 1-9 that totaled \$802,378. However, no additional bond coverage was obtained for the amount paid at that time.

The Contractor informed us that their arrangements with the Surety call for one lump sum payment at completion of the project for the aggregate of all change orders. However, this is in conflict with General Conditions, Article 12 of the IFB documents that state,

"It is the Contractor's responsibility to notify his Surety of any changes affecting the general scope of the work or change of the contract amount and the amount of the applicable bonds shall be adjusted accordingly, and an amended bond document furnished to the County."

The County could not provide a written policy detailing a method for handling the additional bond coverage for change orders. Therefore, there is some confusion as to whether additional coverage is needed on change orders where the

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value of work remaining including the change orders is still within the amount of the original bond.

Neither the Purchasing and Contracts Division nor the Department of Capital Projects ensured that payment and performance bonds were updated to reflect change orders. As a result, there is no assurance that payments made to the Contractor for bonds on increased work due to change orders were used to acquire additional coverage on a timely basis. In addition, if coverage were insufficient the County would be vulnerable in case of Contractor default.

<u>We Recommend</u> the Purchasing and Contracts Division and the Department of Capital Projects work together to determine a consistent approach for the handling of payment and performance bonds for increased work due to change orders. Written guidelines should then be prepared and incorporated in the Divisions' operating manuals.

MANAGEMENT'S RESPONSE:

Concur. Purchasing and Contracts, in conjunction with Capital Projects, has drafted contract language and forms for the Contractors' use for increasing bonds when change orders increase the value of a contract.

8. Written Guidelines for Legal Review of Contracts Should Be Established

The Purchasing and Contracts Division did not refer the contract documents for the County's \$11.9 million construction contract to the County Attorney for review. Also, for the past several years, according to the Purchasing and Contracts Division, the boilerplate used to prepare the IFB instructions and the contract had not been referred to the County Attorney for review. Contracts are governed by County ordinances and regulations. In addition, construction contracts are subject to a wide variety of legal requirements and appropriate language is necessary to eliminate various risks associated with the different types of contracts.



County Admin. Reg. 6.09.02, II, C states that,

"All construction contracts must be routed through the Purchasing and Contracts Division which will be responsible for reviewing for compliance with the County's Fairness in Procurement Ordinance and for coordinating with the Contracts Administrator/County Attorney to ensure that all contract provisions are adequate."

This Administrative Regulation does not include guidelines as to when a construction contract is to be reviewed by the County Attorney. It appears that the current Administrative Regulation leaves the decision, as to when to refer a contract to the County Attorney, up to the discretion of the Contract Administrator.

Without a legal review, contract language may not be adequate to fully protect the interests of the County.

<u>We Recommend</u> the Purchasing and Contracts Division establishes written guidelines for the referral of contract documents to the County Attorney for legal review. Such guidelines should state when a contract should be referred. The scope of work and dollar commitment of the County could be part of the criteria. Also, the written guidelines should prescribe periodic legal review of the boilerplate for IFB instructions and other contract documents.

MANAGEMENT'S RESPONSE:

Concur. Periodic review of contract boilerplate language has been performed and will continue to be performed by the County Attorney's office; however, Purchasing and Contracts does not concur that each individual contract must be reviewed by the County Attorney's office. The statement attributed to the Supervisor of the Contracts Section is not accurate. Boilerplate language has been reviewed as recently as this calendar year. The referral of contracts for legal review is accomplished on a case-by-case basis. These referrals are generally made when there is a



significant departure from the norm or when an unusual or complex contract situation exists. Consequently, a written policy on specific legal review requirements for contracts is not contemplated at this time.

9. The Audit Clause in the Agreements Should Be Strengthened

The audit clause in the County's contracts with the Consulting Engineers and the primary Contractor needs additional language. The audit clause in the contract with the consulting Engineers states the following:

"Records of cost incurred under terms of this contract shall be maintained and made available to the County to examine, audit, make transcripts therefore, or copies thereof, during the period of this contract and for one year after final payment is made."

The clause in the contract with the primary Contractor states the following:

"The Contractor will keep adequate records and supporting documents applicable to this contractual matter. Said records and documentation will be retained by Contractor for a minimum of five (5) years from the date of final payment on this contract. The County and its authorized agents shall have the right to audit, inspect and copy records and documentation as often as the County deems necessary during the period of this contract and during the period five (5) years thereafter; provided, however, such activity shall be conducted only during normal business hours. The County during the period of time expressed by the preceding sentence, shall also have the right to obtain a copy of and otherwise inspect any audit made at the

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direction of the Contractor as concerns the aforesaid records and documentation."

In addition to the above language, a comprehensive audit clause provides access to all related records including a flow-down of requirements to payees, material suppliers, sub-contractors and sub-subcontractors. Also, it should cover audit resolution issues such as reimbursements of overpayments, overcharges, and audit costs if overpricing and/or overcharges exceed an agreed upon percent (for example, one percent) of the total contract billings as a result of an audit.

A more comprehensive audit clause could be a deterrent to over pricing and overcharges.

<u>We Recommend</u> that the Purchasing and Contracts Division works with the Department of Capital Projects to develop a more comprehensive audit clause for construction contracts.

MANAGEMENT'S RESPONSE:

Concur. The audit clause in use was developed with the assistance of the Comptroller's Audit Division. We will submit drafts of all our existing clauses for review and comments from the Audit Division.

AUDITOR'S COMMENT:

To assist management in meeting their responsibility, we will contribute to the development of an adequate audit clause, when requested as we have in the past.

10. The Change Order Clause Should Be Enhanced

The change order clause in the contract should be strengthened to assist the County in negotiating a reasonable amount for pricing change orders. The areas noted are as follows:

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Overhead rates should be reduced relative to the cost of changed work above a certain level

A)

The change order clause prescribes a set of fixed percentages that can be added to the cost to cover administration. overhead However, these percentages are not reduced relative to the cost of the changed work. Thus, a Contractor would receive additional profit for high dollar value regardless of the amount of work changes, performed. For example, if a Contractor was issued a change order that substituted materials and the value of the increased material cost was \$200,000, by adding the specified percentage (e.g. 15 percent) for overhead and profit the Contractor would be paid an additional \$30,000 for overhead and profit. To avoid this on large dollar change orders, the change order clause should specify that the maximum markup percentage allowable should be reduced, on a sliding scale, relative to the cost of the change order.

The cost of small tools and expendables should be included in overhead expenses

B) The change order clause is silent regarding the cost of small tools and expendables. Applicable rates for small tools and expendables should be specified or included in the markup for general administration, overhead and profit.

Labor burden should reflect annual maximum wages subject to payroll taxes

- C) The section of the clause covering payroll taxes and other items generally referred to as labor burden needs more specific information. This clause should specify that the labor burden allowable should be the net actual cost for items such as fringe benefits, insurance and payroll taxes. Net costs should take into consideration such things as premium discounts, dividends, and rebates, as well as the effect of annual maximum wages subject to payroll taxes.
- D) The section of the clause covering material costs does not specify that the Contractor's costs shall be the reasonably anticipated net costs reflecting any cost reductions available to the Contractor due to trade discounts and/or volume rebates. The change order clause should include a statement to this effect.

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Without a comprehensive change order clause, the prices paid by the County for work authorized by change orders could be higher than necessary.

<u>We Recommend</u> that the language in change order clauses be enhanced to reflect the following:

- A) The maximum markup percentage for general administration, overhead, and profit is reduced, on a sliding scale, relative to the cost of the change order for high dollar amounts.
- B) The cost of small tools and expendables be specified or included in the markup for general administration, overhead, and profit.
- C) The abor burden is defined as the Contractor's net actual cost after considering payroll tax (FUTA and SUTA) limits, premium discounts, rebates and other appropriate reductions.
- D) Material costs reflect the Contractor's reasonably anticipated net actual cost after consideration of trade discounts and volume rebates.

MANAGEMENT'S RESPONSE:

- A) Do Not Concur. Both Purchasing and Contracts and Capital Projects do not concur that profit should be decreased for larger change orders, as contractors are exposed to more risk on larger changes and should be compensated appropriately. However, the issue of a sliding scale for general administration and overhead on large change orders has merit. We will schedule a meeting with the Audit Division to seriously consider the development of such a clause.
- B) Do Not Concur. Both Purchasing and Contracts and Capital Projects agree with the concept of including small tools and expendables in the markup and will look towards RS Means as a guideline for costs that should be included in the general administrative and



- overhead percentages. Those costs will be incorporated into the language regarding changes in contract award clauses.
- C) Do Not Concur. Both Purchasing and Contracts and Capital Projects are unclear as to what this comment intends to communicate. Labor burden is defined as the net actual labor burden. While we can require audited financial statements from the prime, we cannot require the subs (or suppliers) to submit audited financial statements. Problems have been encountered in obtaining audited financials from contractors. who generally do not maintain information of this nature as would an architect or engineer.
- D) No response given by management.

AUDITOR'S COMMENT:

- A) The response states "Do Not Concur." However, the text of the response indicates agreement with part of the recommendation.
- B) Although the response states "Do Not Concur", we would consider the recommendation implemented if the steps noted were taken.
- C) Audited financial statements are not part of our recommendation, were never discussed, and would do little to assist in implementing this recommendation. The suggested information can be obtained from the company's detailed payroll records and related reports.

11. The Pricing of Change Orders Should Comply With the Provisions of the Contract

A review of County change orders Nos. 29 indicated that several change orders were processed incorrectly. As a



result, the County could have overpaid the Contractor up to \$24,507. This is shown as follows:

CATEGORY	AMOUNT
Overhead and profit charged by the prime	\$11,630
contractor for work performed by	
subcontractors	
Overhead and profit of subcontractors for	2,950
their own work	
Charges for small tools	2,658
Charges for expendables	6,642
Labor rates and payroll taxes & insurance	627
Total *	\$24,507

^{*} See Attachment A for details.

Each County change order includes numerous change orders referred to as "SCOs" prepared by the Contractor. Our review covered 165 SCOs totaling \$802,345. Change order No. 1 was not included in the review because the net price of the change was a credit of only \$968.

The Supplemental Conditions Part G, Section 8 of the Contract prescribes specific percentages that can be charged for overhead and profit for changes by both the prime contractor and subcontractors. Also, recovery rates for small tools and expendables should be included in indirect expenses or negotiated and specifically stated in the contract if computed separately. In addition, labor burden for the computation of payroll taxes, insurance and fringe benefits should reflect FUTA and SUTA limits, premium discounts, rebates and other appropriate reductions.

We Recommend the following:

A) The Department of Capital Projects with assistance from the Consulting Engineers perform a detailed comprehensive analysis of the pricing of change orders to ensure that pricing is reasonable and in conformance with the contract provisions. Any computation errors detected should be corrected retroactively.



B) The Department of Capital Projects reviews the possible overpayments and requests a credit from the Contractor for the amount determined to be excessive payments.

MANAGEMENT'S RESPONSE:

- A) Partially Concur. Our research of the project documents does not concur with the auditors' findings, although, we do concur with the concept the Audit Division recommends. This project had 354 individual change order requests and all of them were reviewed with our consultants. This particular audit found 48% of these requests had small arithmetic errors. On the table under item 11, we concur with some of the overpayments where were due to incorrect markups on overhead and profit. Within Change Order #12 (attachment B), we obtained reimbursement from the General Contractor thanks to the findings of the Audit Division.
- B) Partially Concur. Item 11B of the audit report outlines five issues. We concur with the first two issues, as there were some overpayments due to an error in the markup percentage applied to some of the change order items. We do not concur with the last three issues. The contract is silent regarding these items therefore provides iustification no In any case, the county has reimbursement. recuperated 82% of the applicable amount of overpayments.

Attached (Attachment B), please find the table from the audit report outlining the five items in 11B, with two additional columns for clarity. There's a column for the applicable amount, which is the accurate amount after correcting mathematical errors and upon confirming compliance with the terms and conditions of the contract. This was important since three of the items recommended for reimbursement cannot be substantiated by the contract. We also added a



column to show the actual amount recovered. Please refer to this table in reviewing our response to each of the items.

12. Adequate Documentation Should Be Maintained to Support Change Orders

Adequate documentation to support the following three change orders was not on hand in the County and could not be provided by the Contractor:

CONTRACTOR CHANGE ORDER	AMOUNT
SCO No. 44	\$33,452
SCO No. 90	34,008
SCO No. 64	3,725
TOTAL	\$71,185

Special Conditions, Section 8, "Change of Contract Amount" and the Invitation for Bid, Article 21, "Maintenance of Records," of the Contract require that adequate records be maintained. Specifically, Special Conditions No. 8 requires that "the Contractor's written claim for a change in the contract amount shall include a detailed, itemized breakdown to fully document, justify and otherwise support the claim."

The Department of Capital Projects should ensure sufficient documentation is obtained prior to authorizing payment. Without adequate supporting documents, there is no assurance that the prices paid for these change orders were fair and reasonable.

<u>We Recommend</u> the Department of Capital Projects ensures that sufficient documentation to support change orders is obtained and reviewed prior to agreeing to a change in the contract amount and then properly filed.



MANAGEMENT'S RESPONSE:

Do Not Concur. Our research of the project documents does not concur with the auditors' findings, although, we do concur with the concept of the auditor's recommendations. We agree with the need for sufficient documentation to support change orders. According to the audit findings SCO 44, 90, and 64 do not have back-up. Please refer to the table below and attachments

- 1) SCO #44 for \$33,452: detailed information & back up is filed (Attachment B). Note that SCO #44 doesn't have labor breakdown. The work was a combination of small parts in a lavatory manifold. The labor rates were an actual average of five (5) manifolds already installed.
- 2) SCO #90 for \$34,008: detailed information & back up is filed (Attached B).
- 3) SCO #64 for \$3,725: originally submitted for \$10,983 but revised due to insulation only required. Orange County, Consultants and the Contractor agreed upon price. (Attached B)

AUDITOR'S COMMENT:

We do not agree that the subsequent information provided contains adequate support. Based on our review of SCO No. 90, there is no breakdown as to how labor costs were determined. Also, the cost for SCO No. 90 was reduced by the amount of SCO No. 44 (which does not contain a breakdown of the material and labor).

13. The Approval Process for Change Orders Should Be Improved

As shown below, changed work was performed without approval from the Purchasing and Contracts Division and the Board of County Commissioners (Board) prior to the work being performed.

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Change orders should be approved before commencement of work

A)

- Work amounting to \$46,813 or 54 percent of the work covered by change order No. 2 was completed and billed prior to the issuance of the formal change order. The pay application, dated February 24, 1999, was revised by the Department of Capital Projects to exclude payment of the changed work because there was no formal change order to support the payment. The formal change order was not approved until March 3, 1999. This change order included thirteen SCOs totaling \$86,690. Two of these, SCO No. 11 and No. 12 totaled \$14,958 and were dated November 11, 1998, nearly four months before the formal change order was issued. The remaining eleven SCOs totaling \$71,732 were dated January 11, 1999 nearly two months before the formal change order was issued. Change orders should be approved on a timely basis.
- B) Change order No. 8 included twenty-two SCOs ranging in price from a decrease (credit) of \$8,895 to an increase of \$58,334. Change order No. 8 required Board approval because total changed work had now exceeded five percent of the original contract. However, some of the changed work in change order No. 8 had already been done and paid for before approval was requested from the Board. Contractor's payment request No. 22 dated April 18, 2000, covering work for the period April 1, 2000 through April 30, 2000 was approved for payment by the Department of Capital Projects on April 25, 2000. This included a payment of \$55,000 for change Order No. 8, which totaled \$122,784. However, Change order No. 8 was not brought before the Board as a Consent Agenda Item for approval until May 16, 2000. Thus, some of the work was ordered and paid for before receiving the required Board approval.

Section X of the Orange County Purchasing Procedures Manual requires Board approval for all change orders after the change order limit of \$50,000 or 5 percent of the original contract amount (whichever is higher) has been exceeded.

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The process tends to cause delays in obtaining approval because documents for work that has often been started or completed on a typical SCO are sometimes actually held up and combined with other SCOs into a change order that is subsequently issued to the Contractor. So while the Board is being requested to approve the change, some of the work has already started or completed.

According to the Department of Capital Projects, it is often necessary to order the Contractor to start work on changes prior to receiving approval from the Purchasing and Contracts Division and/or the Board. Also, the issuance of a formal change order as the alternative would stop work until the change is approved. This would cause increased costs.

The Department of Capital Projects violated County purchasing polices in the instances where it ordered work to be performed without approval from the Purchasing and Contracts Division and/or the Board. Also, without timely approval, work could be delayed or forced to commence without the necessary paperwork which could lead to misunderstandings and disputes over pricing and scope of work.

We Recommend the following:

- A) The Department of Capital Projects works with the Purchasing and Contracts Division to speed up the approval process so that formal change orders showing pricing and scope of work are approved and issued prior to the commencement of changed work.
- B) Consideration be given to amending the approval process so that approval of funds can be requested from the Board based on estimates of pending change orders in order to eliminate the possibility of halting construction while awaiting approval. This would also prevent frequent requests to the Board for approval of changes involving small amounts.
- C) In those unusual cases that meet emergency criteria where prior approval is not possible, the Department



of Capital Projects' Project Manager should prepare a memo for the file detailing the scope of work, the agreed price, and why it was necessary to proceed without an approved change order. This information should be provided to the Purchasing and Contracts Division and the Board, as applicable, when formal approval is requested.

MANAGEMENT'S RESPONSE:

- A) Concur. Capital Projects and Purchasing and Contracts concur the process should be timelier while recognizing that approval requirements sometimes work against this goal. Changes to the Procurement Ordinance should assist in expediting the approval process.
- B) Concur. Pending changes cannot be determined up front.
- C) Concur. While we concur that prior approval for change orders should be obtained wherever possible, it should be noted that work required will always need to be performed on via change orders which would impact the critical work of the County. The County may also face claims for delay from the contractor.

14. Notice to Proceed Should Not Be Issued for Sole Source Work Prior to Approval

The County issued a sole source purchase order dated February 2, 2000, for \$335,409 to the Contractor to replace the roofs of Buildings E and F. However, the Department of Capital Projects improperly authorized the commencement of the work prior to authorization by the Board.

Regarding this transaction, we note the following:

A) The sole source purchase was approved by the Board based upon information provided by the Department of Capital Projects. On January 24, 2000, in its

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request for approval, the Department of Capital Projects wrote that,

"It is imperative that this sole source to Sauer be approved so that the work can be done immediately, within the current project schedule and coordinated to coincide with all other work. If Facilities Management contracted with another company it would take several months for the work to begin."

The Department of Capital Projects had already issued a notice to proceed (NTP) dated September 28, 1999, to the Contractor. This date is approximately four months before the Division sought approval from the Board. The Contractor also commenced the work prior to approval from the Board, as the Board approved the work on February 1, 2000. However, the first invoice from the Contractor for \$170,000 was dated January 3, 2000, approximately four weeks prior to the Board approval. County ordinance requires Board approval for all contracts exceeding \$100,000.

B) The County paid an additional \$21,400 for overhead and profit as a result of the scope of work being handled as a separate purchase order instead of a change order. The total overhead and profit on the work was \$66,199 or 22.5 percent. This was broken down as follows: \$23,400 or 7.5 percent to the Contractor and \$42,799 or 15 percent to the subcontractor. Had the work been handled as a change order, the total amount for overhead and profit would have been limited to 15 percent with a saving of 7.5 percent or \$21,400 to the County. The scope of work appeared to be within the intent of the original project and as such, could have been handled as a change order.



We Recommend the following:

- A) The Department of Capital Projects should not issue notice to proceed to contractors for work that needs to be approved by the Board prior to obtaining Board approval.
- B) The Department of Capital Projects should consider the additional payment of \$21,400 to the subcontractor in its negotiations with the Contractor for credit refunds.

MANAGEMENT'S RESPONSE:

- A) Partially Concur. The Notice to Proceed was written clarifying that approval to the Board of County Commissioners had not yet been obtained. The NTP was clear regarding the situation, considering the County had a true emergency. The steps taken were precisely what the draft audit report recommended (See item 13 C). The emergency required delivery of material (roofing) to avoid serious impacts on the schedule. It is recognized that considerable time elapsed as the emergency P.O. should have been written closer to the Notice to Proceed date.
- B) Do Not Concur. Our research of the project documents does not concur with the auditors' findings, although, we do concur with the concept recommended by the Audit Division. We disagree with the findings, as the scope of work was not part of the original contract scope. This condition requires us to process the service and/or work under a separate contract, which was done. The appropriate fair market and contractual markups were used.

AUDITORS' COMMENTS:

While we recognize, that in extreme cases, the County policy to require Board approval prior to issuance of the NTP may not be practical, we do not believe four months should pass between the date of the NTP and requesting Board approval.



Recommendation No. 13C does not recommend such a delay.

15. The Scope of Work Covered in Related Contracts Should Not Be Duplicated

Certain scopes of work for repairs to the roof and lightning protection system for Buildings E and F that were included in the original contract for \$11.9 million dollars could have been duplicated under the separate purchase order for the installation of new roofs on the same buildings. These areas are as follows:

A) The schedule of values for the original contract for the restoration of Buildings D, E and F included the following scope of work relating to the roof of Buildings E and F:

DESCRIPTION	CATEGORY	AMOUNT
Building F		
Roof Membrane Insp/Report	Material	\$3,400
	Labor	5,200
Demolition Ext/Roof	Material	2,100
	Labor	7,000
Roof Membrane Repairs	Material	3,100
	Labor	3,640
Subtotal		24,440
Building E		
Roof Membrane Insp/Report	Material	12,900
	Labor	15,100
Demolition Ext/Roof	Material	9,100
	Labor	18,200
Roof Membrane Repairs	Material	14,800
	Labor	11,400
Subtotal		81,500
TOTAL		\$105,940

However, the estimates submitted on September 24, 1999 by the Contractor to the County for the replacement of the roofs to Buildings E and F under the separate purchase order includes the following scope of work:

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- "Fully remove the existing J. P. Stevens single roof ply roof system and all tapered roof insulation on all roof areas, down to concrete deck and dispose of same.
- Furnish and install new J. P. Stevens white EP single ply roof membrane system on all roof areas fully adhered to new lightweight concrete."
- B) The invitation for bid documents for the original contract requires "installing a new lightning protection system." Further, the specifications Section 16671 states "A Lightning Protection System shall be provided and installed on the structure even though not shown on drawings."

However, a subcontract for \$10,800 under the purchase order for \$335,409 requires the subcontractor to:

- "Furnish all labor and materials to remove, prior to roof demo, and reinstall, after roof replacement, the complete lightning protection system for Buildings E and F.
- Reinstall any existing useable material and replace all damaged material."

Related contracts should be reviewed for scope duplication

Based upon the language of the original contract and support documents for the purchase order, it is possible that there was a duplication of work in both agreements. As a result, the Contractor could owe the County a credit for the following:

- The full amount of \$32,940 for "Roof Membrane Repairs."
- A prorated portion of the amounts totaling \$73,000 for labor and materials for "Roof Membrane Insp/Report" and "Demolition of Ext/Roof."



• The full amount of \$10,800 for repairs to the lightning protection system.

These amounts should be reduced by any applicable portion of the \$26,920 credit that the Contractor had given to the County for unperformed work relating to the roofs of Buildings E and F (The Department of Capital Projects did not have the details of the items covered by this credit).

We Recommend the following:

- A) In situations where additional contracts are given for work on a project, a comparison of the scope of work covered by the contracts should be performed to eliminate possible duplication.
- B) The Department of Capital Projects should meet with the Contractor and request a refund for any overpayments made as a result of the duplication of scope.

MANAGEMENT'S RESPONSE:

- A) Concur. Although, we concur with the concept the auditor recommends, our research of the project documents do not concur with the auditors' magnitude of findings. One of the fundamental duties for each Project Manager is to ascertain that change orders represent actual increases in scope and that they are priced fairly. In this particular situation, not only the project architect but also Capital Projects project manager reviewed the possibility of scope duplication. We ascertained that there was scope duplication only in membrane repairs. Building E actually had a scope duplication cost of \$26,920 which was deducted from the replacement cost prior to this audit. Building F had a scope duplication cost of \$6,700 which was recuperated on change order number 12 (attachment B), thanks to the audit.
- B) Partially Concur. Our research of the project documents does not concur with the auditors'



magnitude of findings. Although, we do concur with the concept the auditor recommends. We disagree with the findings, as there was only one scope duplication item. The \$26,920 duplication for Building E was deducted prior to the audit from the replacement cost leaving only \$6,700 for Building F scope duplication which was collected in change order number 12. (See item 15 A above).

16. The Department of Capital Projects Should Ensure Compliance With Contract Provisions for Retainage

Unless supported by written contract amendment, retainage rates should be those specified in the contract

An incorrect rate was used to compute retainage for the months of July, August and September 1999 for Building D. The Contractor reduced the rate of retainage from 10 percent to five percent beginning July 31, 1999, with application for payment No.12 and No.13. The rate was further reduced to one percent on application for payment No. 14 dated September 30, 1999. Documents on file showed that restoration of Building D was completed on July 7, 1999, and was turned over to the County on July 15, 1999. The temporary Certificate of Occupancy was issued However, Close-out/Operating and on July 8, 1999. Maintenance Manuals were not turned over to the County until October 7, 1999. In addition, the Department of Capital Proiects was unable to provide us with a copy of the transmittal letter evidencing the turnover of "as-built" drawings.

According to the contract, retainage is to be applied at the rate of 10 percent of the application for payment covering amounts properly allocable to labor, materials and equipment until final completion of each phase of work when the rate is to be reduced to one percent. Upon final completion of the entire work, all retainage is to be released. In addition, Supplemental Conditions (SC No. 3) requires the Contractor to submit "as-built" drawings and project closeout manuals to the County's Project Manager for each phase of the work to be considered for Final Completion.

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Since the closeout manuals were turned over in October 1999, the reduction in retainage rate should have been from 10 percent to one percent effective for application for payment No.15 submitted October 30, 1999. The application of an incorrect retainage rate (five percent) at the improper time resulted in the release of approximately \$260,000 of retainage three months early and approximately \$210,000 one month early. According to the Department of Capital Projects, retainage was computed at the Project Manager's discretion.

<u>We Recommend</u> the Department of Capital Projects ensures compliance with the terms of the contract for retainage.

MANAGEMENT'S RESPONSE:

Retainage is held to safeguard the County in Concur. assuring the receipt of closeout documents. There are several of these closeout documents, the as-built drawings being one of them. More importantly are the subcontractor releases of lien and the Operating and Maintenance (O & M) Manuals. Regarding the as-built drawings, the most important undertaking is that the General Contractor and applicable sub-contractors redline or markup the drawings on a continual basis as construction takes place. An example of a redline is when the actual location of an underground plumbing line is built a certain distance other than exactly where the design drawings showed it to be. The main purpose of the as-built drawings is to assist the County in the future in locating some buried element, such as the pipe described in the example above. The contractor's set of as-built drawings is comprised of all sub-contractors' subsets. That way the electrical subcontractor redlines all electrical plans modified, the plumbing subcontractor marks all plumbing changes, etc. Once construction is completed, the complete set is given to the architect of record to re-draw in a final "as-built" set. At the time of the retainage reduction from 10% to 5%, all close out documents for Building "D" were received except the as-built drawings of one of the subcontractors, the security sub-contractor. We are attaching (attachment B) the transmittal memorandum of the



eleven O & M manuals to Facilities Management and others dated July 17, 1999. Incidentally the transmittal dated October 7, 1999 was for an additional set of eleven manuals that Facilities requested for their office file. It took some time to unbind and make the copies which was later transmitted to Facilities, the work was completed and delivered on July 17, 1999. This was not per the terms of the contract, since as a precautionary measure, the retainage was dropped to 5% rather than 1% on application for payment number 12 that covered work performed up to 7/31/99. This remaining 5% was sufficient retainage in case the one subcontractor was not to deliver his as-builts.

17. Adequate Supporting Documents Should Be Obtained Before Applications for Payment (Containing Materials Stored on Site) Are Approved

Payments for materials stored on site should be adequately supported

Our review of the supporting documents provided by the Contractor for a sample of ten payments for materials stored on site revealed the following:

- There was no detailed itemized listing of the material stored at the site.
- There was no receiving report or other documentation to show that the materials were received at the site.
- There were no invoices to support \$364,335 (40 percent) of the \$916,498 cost of the materials claimed to have been delivered and stored on the site.

The Invitation for Bid, Article 19, Application for Progress Payment states,

"If payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at the site... each request shall include the submittal by the Contractor of (1) a detailed, itemized inventory listing the material stored at



the site for which payment is requested, (2) documentation to indicate and substantiate the cost or value attributable to the items included in the stored material inventory list...."

Without adequate supporting documents, the County could be making payments for materials that were overvalued or never delivered to the site. Should this occur, and the Contractor defaults on the contract, the bonding company could disallow any claim for payments made for materials that should have been on site but actually were not.

<u>We Recommend</u> that the Department of Capital Projects ensures that the Contractor complies with the terms of the contract and provides adequate supporting documents for materials stored on site before approving applications for payment.

MANAGEMENT'S RESPONSE:

Partially Concur. Materials stored on-site are inventoried with each application for payment. The most important consideration is that the materials are securely placed on site so that in the eventuality of a dispute, the materials cannot be removed by a sub-contractor or by the General Contractor. All materials carefully inventoried for this project were held in locked containers within the fenced project area. The schedule of values for this project had detailed costs for each line item. Furthermore the line items were broken down into Labor and Material components. We partially concur with the audit findings, as there was no possibility of a dispute regarding quantity and ownership of stored materials. The price back-up was derived from the detailed Labor and Material specific schedule of values, rather than actual invoices.

AUDITOR'S COMMENT:

The contract provides for specific documentation other than the schedule of values to substantiate materials stored on site. The information contained in the schedule of values is not sufficient documentation.



18. Progress Payments for the Consulting Engineers Should Be Based Upon Their Performance and Changes Made to the Contract Terms Should Be by Written Amendments

According to Section II B of the contract with the Consulting Engineers, progress payments for services performed were to be made on a monthly basis proportionate to the percentage of construction work approved by the County. However, this type of consulting contract should not stipulate payments to Consultants based on work accepted by the County. Consultants should be paid based solely upon work actually performed by them regardless of whether the prime contractors' work is approved by the County.

We also note that payments for a change order totaling \$162,950 were made to the Consultant in equal monthly installments to help alleviate the above noted problem. However, the change in the method of payment was not done through a formal amendment to the contract. Such undocumented departure from the contract stipulation could weaken the effectiveness of the contract.

We Recommend the following:

- A) For future Consulting Engineering contracts, the method of progress payments (with respect to inspection and technical services relating to construction work performed) should not be based upon the amount of construction work that is completed and approved. Instead, payments should be based upon the performance of the Consultant.
- B) Any changes made to the method of payment specified in a contract should be done only through a written amendment to the contract.

MANAGEMENT'S RESPONSE:

 A) Concur. Standard contract language has payments made in proportion to the percentage of engineering/architectural work completed and



accepted. Specific language was added to the contract boilerplate for this engineering contract as follows, "However, for services provided and performed by the Consultant pursuant to the Task entitled 'Construction Contract Inspection and Technical Support Services', progress payments shall be due and payable monthly in proportion to the percentage of construction work approved by the County, based on the fee quotation for this Task as set forth in Exhibit B." This resulted in lesser payments to the consultant up front.

- B) Concur. There was no need to create a contract amendment, as this language was included in the contract that was executed. We do not anticipate using this method of compensation on future contracts of this nature.
- 19. Reimbursement Should Be Sought for County Power Consumed by the Contractor and Verbal Agreements for Trade-offs Should Not Be Entered Into With Contractors

The Contractor did not reimburse the County for the cost of electricity that it consumed in two forty-foot trailers during the construction period of approximately twenty-seven months.

A) To provide power and light to the trailers, the Contractor tapped into the County's electricity. However, no meters were installed to measure the amount of electricity consumed. Article 9, "Contractor's responsibilities" of the IFB documents states that,

"The Contractor will furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and incidentals necessary for the execution, testing, initial operation and completion of the work."

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All changed work should be supported by authorized change orders Based upon the verbal estimate of a Facilities Management technician, each trailer could have consumed \$50 to \$70 of electricity each month during the period. This would result in the consumption of electricity of \$2,700 to \$3,780 for both trailers for the period of twenty-seven months.

B) The Department of Capital Projects verbally agreed that the Contractor could use County electric power free of charge at the trailers during the restoration of buildings F and E in exchange for the installation of fencing and access improvements to the rear of Buildings D, E and F where the trailers were located. The Contractor would also control the gate access thus eliminating staffing at the gate by personnel from the Corrections Division. The contract provides that additions or reductions in scope of work should be handled by written change orders.

Because of the lack of meters, the County may not be able to determine and recover the true cost of the electricity consumed by the Contractor. Also, verbal trade-off agreements could weaken the elements of a written contract.

We Recommend the following:

- A) The Department of Capital Projects enters into negotiations with the Contractor with a view to recovering some of the costs of the electricity that it used.
- B) The Department of Capital Projects refrains from entering into verbal agreements for trade-offs with Contractors and complies with contract requirements to use written change orders.

MANAGEMENT'S RESPONSE:

A) Partially Concur. Our research of the project documents does not concur with the auditors' findings. Although, we do concur with the concept the



auditor recommends. We disagree with the findings that the amount of electrical consumption to recover is between \$50 and \$75 each month for 27 months totaling between \$2,700 and \$3,780. The Contractor was utilizing County-paid electricity during the construction of building D only. This situation took place for 10 months. Due to the findings in this audit, we negotiated a recovery rate of \$80 per month while the electric consumption took place. Please note the \$800 recovery in change order number 12 (refer to back up attached {attachment B} to it.)

B) Partially Concur. Our research of the project documents does not concur with the auditors' findings. Although, we do concur with the concept the auditor recommends. We disagree with the findings, as we had verbal agreements regarding the electrical consumption for Buildings E and F. We are attaching two written documents outlining the terms of agreement. One is the Project Manager's bound project manual book (attachment B), where notes of meetings are recorded; the other is the facsimile correspondence dated June 30, 1999 (attachment B) detailing in two pages the terms and responsibilities of each party. Please find said documents attached showing that there were no "verbal agreements." A formal written agreement would have been better.

AUDITOR'S COMMENTS:

Handwritten notes in the project manager's manual of a verbal agreement and a facsimile from the County's Project Manager to the Corrections Department describing the trade-offs are not equivalent to a written change order.

20. Contract Language With Respect to the County's Ownership of Salvageable Materials Should Be Expanded

During a walk-through to inspect the work in progress, we noted a large amount of scrap plumbing, including some

RECOMMENDATIONS FOR IMPROVEMENT



composed of copper. The County's Project Manager stated that the materials had some value but all salvageable materials belong to the Contractor per the provisions of the contract. The Contractor's on-site representative stated that the material had no value but did not comment on the disposition.

The contract specifications (Selective Demolition, 3.01 Salvage) states,

"Any salvaged items that are determined to be of no value to the owner after removal and owner's inspection shall be removed from the site by the Contractor."

This statement implies that the County owns all salvageable materials. Since the project involves substantial restoration of the buildings, the value of salvaged materials could have been significant. Although we did note that certain County departments did salvage some materials, there was no record kept to document that salvageable material was periodically reviewed.

<u>We Recommend</u> contract language be improved to ensure that the County's ownership of salvageable materials is explicitly stated.

MANAGEMENT'S RESPONSE:

Do Not Concur. Our research of the project documents does not concur with the auditor's findings. Although, we do concur with the concept the auditor recommends. We disagree with the findings as stated: There were not any salvageable materials of value to the County. In a project where there are salvageable materials, we do have specific language in the contract to ensure County ownership. For example, in the Corrections Work Release expansion, also managed by the same project manager, we salvaged seven 3-Ton heat pumps and had them delivered to Facilities Management for their use in other County buildings. Salvageable items are addressed on a case-by-case basis when scope of work makes it applicable.



AUDITOR'S COMMENT:

We believe adequate language specifying ownership should be included in all contracts involving restoration, as it is often not determinable if salvageable property will be found until a project is underway.

21. The Department of Capital Projects Should Ensure All Applicable Warranties Are Processed Promptly After Work Is Completed

During our review of the project files, we found that the roof warranty for work done on Building B under a previous contract was never registered. The unsigned original warranty and copy were still in the files at the Department of Capital Projects three years after work was completed. The roofing company, in a letter dated October 28, 1997 requested that the warranty be signed and one copy returned to them. The letter also stated that the warranty would be in force for ninety days after the date of issuance, pending receipt of the signed copy of the warranty. The warranty was for a period of ten years.

The auditors contacted the roofing company and determined that the warranty fortunately was in effect; assuming none of the warranty conditions had been violated. However, the company's representative said that a copy of the warranty should be signed and returned to them for their records as soon as possible. After being informed of this, the Department of Capital Projects signed and returned the warranty documents to the roofing company. Although it was confirmed that the warranty was still in effect, the inaction on the part of Department could have resulted in the loss of warranty coverage.

<u>We Recommend</u> the Department of Capital Projects ensures that all applicable warranties are processed promptly after work is completed.



MANAGEMENT'S RESPONSE:

Do Not Concur. Our research of the project documents does not concur with the auditors' findings. Although, we do concur with the concept the auditor recommends. However, note that for this particular case involves a deceased project manager. We disagree with the findings as the item in question is on a different building, not in the D, E, F project being audited.

AUDITOR'S COMMENT:

When this item was brought to Capital Project's attention during the audit, the warranties were signed and mailed to the appropriate party. Disagreeing with the finding solely because it related to a different building within the Corrections construction restoration project distracts from making a commitment to ensure this is performed in the future.

22. The Business Development Division Should Ensure That Purchase Orders Submitted to Them as Evidence of Work Allocated to M/WBE Subcontractors Are Properly Authorized

A review of six contracts/purchase orders submitted to the Business Development Division as evidence that work was allocated to M/WBE subcontractors revealed that two purchase orders were not signed by anyone representing the Contractor. The purchase orders were issued on August 19, 1998 and September 28, 1998 for \$76,014 and \$460,000 respectively. Unsigned purchase orders do not provide sufficient evidence that the subcontractors were given the work. Good business practices require that purchase orders be signed by authorized personnel of a company before the purchase orders can be considered valid.

<u>We Recommend</u> that the Business Development Division ensures that all purchase orders and contracts issued to M/WBE subcontractors by prime contractors are signed by the prime contractors.

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MANAGEMENT'S RESPONSE:

Concur. We concur with this recommendation. It is part of our division's internal procedures to check all written documentation to verify signatures of contracting parties. We have shared your recommendation with staff and have again stressed the importance of following all established monitoring procedures consistently.

ATTACHMENT A – CHANGE ORDER ADJUSTMENTS

ATTACHMENT A – Change Order Adjustments

No.	DESCRIPTION	AMOUNT
1.	The contract prescribed a markup of 7.5 percent for overhead and profit to the prime Contractor on work performed by subcontractors under change orders. However, on thirty-eight (23 percent) of the SCOs, the prime Contractor charged, and was paid, an amount representing a markup of 15 percent on the work done by sub-Contractors.	\$11,630
2.	The contract prescribes a markup of 7.5 percent for overhead and profit for sub-contractors on their own work under change orders. However, on ten (six percent) of the SCOs the sub-contractors applied a mark-up of 15 percent to the work that they performed. The total amount of overcharges for this category of costs was \$2,950.	2,950
3.	There were 50 SCOs where the labor was performed by the prime Contractor and a factor of eight percent was added to the cost of direct labor to recover the cost of small tools used during the work. This amounted to a total of \$10,739. The rate of eight percent appears to be too high because of the following: • The contract change order clause does not address how the cost of small tools should be considered in pricing change orders.	2,658
	Because the cost of small tools usually cannot be accurately determined as to the specific job to be charged, their cost is customarily classified as an indirect cost and therefore should be included in the overhead cost.	
	 The Contractor had a previous contract with the County to perform similar work on Buildings A, B and the CEP. When pricing SCOs for these buildings, the Contractor only added a factor of three percent (and in one case five percent) to the cost of direct labor to recover the cost of small tools. 	
	As a result, a rate of three percent was considered to be more appropriate. However, to be conservative, we consider five percent to be the maximum allowed.	
4.	There were 24 SCOs where materials were provided by the Prime Contractor and a factor of 13 percent was added to the cost of materials for "expendables". These items totaled \$6,642. When asked for a definition of expendables, the Contractor's on-site representative stated that this covered	6,642

ATTACHMENT A – Change Order Adjustments

such items, as fasteners, welding supplies, gas and other incidentals that could not be charged to a specific job, and 13 percent was the estimated amount that the Contractor calculated to cover these items.	
We do not consider this additional charge of 13 percent to be appropriate because of the following:	
The contract change order clause does not address how the cost of expendables should be considered in pricing change orders.	
Because it usually cannot be accurately determined as to the specific job to be charged for these items, their cost is customarily classified as an indirect cost and therefore should be included in the overhead cost which is covered by the15 percent markup.	
For SCOs relative to Buildings A, B and CEP on a previous contract, the Contractor did not add a factor for expendables to the cost of materials.	
The applicable SCOs included detailed schedules of all the materials used for the changed work, even items valued at only twelve cents each.	
5. The applicable labor rate for the various skills involved in the work was included on 27 SCOs. The labor rates were increased accordingly for payroll taxes and insurance and for fringe benefits. We compared the labor rates as shown in the SCOs to various payrolls for the months of April 1999 and August 2000 and adjusted the amounts claimed to reflect the actual labor rates shown in the payrolls for these months. We also adjusted the percentages shown for payroll taxes and insurance to reflect the \$7,000 earnings limit for FUTA and SUTA. In addition, we adjusted the fringe benefits and the amounts for unemployment tax to show the specific rates applicable for each skill.	627
TOTAL	\$24,507

ATTACHMENT B – MANAGEMENT'S EXHIBITS

Please contact our office for a complete copy of management's exhibits