



Internal Audit Report



Construction Claims, Allowances and Contingencies



Improvements in internal controls and proper execution of construction contracts and procedures are needed to reduce the risk of incurring unnecessary costs.

January 2009

THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA

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Mr. Renier Diaz de la Portilla
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Superintendent of Schools

Mr. Allen M. Vann, CPA
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Office of Management and Compliance Audits

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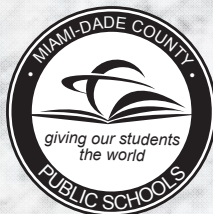
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January 22, 2009

Members of The School Board of Miami-Dade County, Florida
Members of the School Board Audit Committee
Mr. Alberto M. Carvalho, Superintendent of Schools

Ladies and Gentlemen:

In accordance with the Audit Plan for the 2008-09 Fiscal Year, we have performed an audit of construction claims, allowances and contingencies usages. The objective of the audit was to determine the propriety of change order, contingency, and allowance usages. This included determining whether amounts paid were justified, substantiated and properly authorized prior to payment.

Our audit found that the Office of School Facilities (OSF) policies and procedures that govern the approval and management of change orders, contingency adjustments and allowances need improvement. During the course of a project, OSF staff does not reconcile the construction manager's (CM) use of allowances to ensure that any unused amounts are refunded to the District, and does always competitively price allowances at the time they were used.

Although specifically disallowed by contract and/or procedures, the District paid \$320,000 in change orders and contingency adjustments, which directly resulted from conflicts between project drawings and existing conditions. Additionally, change orders totaling \$542,382, resulting from architect and engineer (A/E) errors and omissions were paid, contrary to OSF's procedures. The District was overcharged \$36,650 for project bonding cost included in change order calculations.

A draft of this report was issued on October 31, 2008 to the Office of School Facilities, for their review and comment. We requested that the OSF provide a management response and corrective action plan by November 21, 2008, in order to present this to the December 2, 2008 Audit Committee meeting. The response included herein was not received in sufficient time for us to review and incorporate with our findings and recommendations.

Sincerely,

Allen M. Vann, CPA, Chief Auditor
Office of Management and Compliance Audits

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EXECUTIVE SUMMARY

This is the second of two recently published audits on the District's capital construction program. The first audit focused principally on the project award and guaranteed maximum price (GMP) negotiation phases of the program.¹ That audit concluded that there were significant deficiencies with the GMP establishment and bidding processes, including not obtaining bids for significant portions of the work awarded. This audit focused on the management practices employed over the use of project contingency, allowances and change orders.

The audit covered projects that were completed or ongoing to a substantial degree between July 1, 2004 and March 12, 2008. The total value of the projects awarded, during the audit period, was approximately \$1.81 billion. From this total, we sampled nine (9) projects valued at approximately \$59.1 million, with net change orders and contingency adjustments of approximately \$5.7 million.

The audit found that the Office of School Facilities (OSF) has written policies and procedures that govern the approval and management of change orders and contingency adjustments. However, non-compliance with established policies and procedures had an adverse financial impact on the District. Furthermore, those policies and procedures need enhancements to enable consistent and adequate validation of change orders and contingency adjustments. Additionally, the audit found that written policies and procedures for the use, approval and management of project allowances were not in place. The administration has subsequently drafted procedures to manage the use of project allowances; however, those procedures are pending finalization and implementation.

Our audit found that the amounts paid for allowances, contingency adjustments and change orders were not always subject to competitive pricing and/or independent estimates, at the time they were used. Moreover, OSF staff was not reconciling the construction manager's (CM) use of allowances, during the course of the projects or at their completion, to ensure that any unused portions are refunded to the District.

The terms of the construction contract relative to change orders and contingency adjustments are not consistently enforced. We sampled 148 change orders and contingency adjustments totaling \$5.7 million and found that \$319,882 or 5% were the direct result of conflicts between drawings and the existing underground conditions. The contract specifically disallows change orders for such conflicts. Additionally, we found five (5) change orders, totaling \$542,382, resulting from

¹ Miami-Dade County Public Schools, Office of Management and Compliance Audits, Internal Audit Report, Award and Administration of Construction Projects, September 2008

architect and engineer (A/E) errors and omissions. Similarly, OSF's procedures prohibit compensating the CM through change orders for A/E errors and omissions. On the other hand, A/Es are contractually held harmless for combined errors and omissions up to 1½% of a project's total construction cost. The CM has no such safe-harbor and is often inappropriately reimbursed by District staff for such costs. In its recently published audit on the District's financial, operational, and Federal Single Audit, Florida Auditor General recommended that the School Board consider revising future A/E contracts to eliminate the 1½% errors and omissions allowance.²

Certain costs included in the change order calculations were in conflict with contract provisions. Twenty-eight (28) cases of overcharges were noted. In 15 of the 28 cases, the CM was paid an amount for performance bond, which was stacked on an amount charged by the subcontractor for performance bond. In the remaining 13 cases, the CM not only sought to be compensated for performance bond, but also for an additional bond called Sub guard. There is no process in place to verify that the CM actually incurred the additional bond cost for which he/she is being compensated.

Based on our observations, we made eight (8) recommendations. This report was originally distributed on October 31, 2008 and subsequently on January 12, 2009 as a draft to the Office of School Facilities, for their review and comment. Pursuant to School Board Rule 6Gx13-2C.1.14, we requested that the OSF provide a management response and corrective action plan, which would have been included with this final report. The Office of Management and Compliance Audits did not receive written a management response and corrective action plan by either the initial November 21, 2008 or January 16, 2009 due dates. Inasmuch as the deadlines for submitting a response was reached, this report is being issued as is. If a response from management is subsequently received, it will be distributed under a separate cover.

Our detailed findings and recommendations start on page 8.

² Auditor General, David W. Martin, CPA, Miami-Dade County District School Board, Financial, Operational, and Federal Single Audit For the Fiscal Year Ended June 30, 2007, March 2008, Report No. 2008-158, pp.9-10.

INTERNAL CONTROLS

Our overall evaluation of internal controls for the change order and use of allowance and contingency processes is summarized in the table below.

INTERNAL CONTROLS RATING			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls		X	
Policy & Procedures Compliance		X	
Effect		X	
Information Risk		X	
External Risk		X	

INTERNAL CONTROLS LEGEND			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls	Effective	Opportunities exist to improve effectiveness.	Do not exist or are not reliable.
Policy & Procedures Compliance	In compliance	Non-Compliance Issues exist.	Non-compliance issues are pervasive, significant, or have severe consequences.
Effect	Not likely to impact operations or program outcomes.	Impact on outcomes contained.	Negative impact on outcomes.
Information Risk	Information systems are reliable.	Data systems are mostly accurate but can be improved.	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions.
External Risk	None or low.	Potential for damage.	Severe risk of damage.

BACKGROUND

To meet the facilities needs of Miami-Dade County Public Schools (M-DCPS), the Office of School Facilities principally engages the services of construction managers to construct and/or manage the construction of the District's facilities. The District uses Construction Management at-Risk (CM at-Risk) contracting to procure these services. A guaranteed maximum price (GMP) is negotiated for the full cost of each project awarded. The GMP comprises the value of all subcontracts, all project allowances, owner's contingency, and the construction manager's (CM) fees, including overhead and profit.

Subcontracts are written for scope of work for which competitive bids are typically received from subcontractors.

Allowances are sometimes included in the approved GMP for scope of work, that for whatever reason, a cost could not be determined at the time the GMP is established. Competitive bid packages are usually not received for allowances prior to or after the GMP is awarded. Subsequent approval for the uses of allowances is required from the project team.

To allow for unforeseen conditions, an owner's contingency of 5% to 10% is included in the GMP. This is an amount which represents a source of funds to perform work that may arise, which was unforeseeable by the Construction Manager and the Owner at the time of execution of the GMP. Since the contingency is included in the Board approved GMP, the use of contingency need only be approved by the Technical Review Committee (TRC). The unused portion of the contingency is removed from the project budget structure and made available for use by other projects. Once the owner's contingency is exhausted, any changes to the GMP must be processed in the form of a change order and approved by the Board.

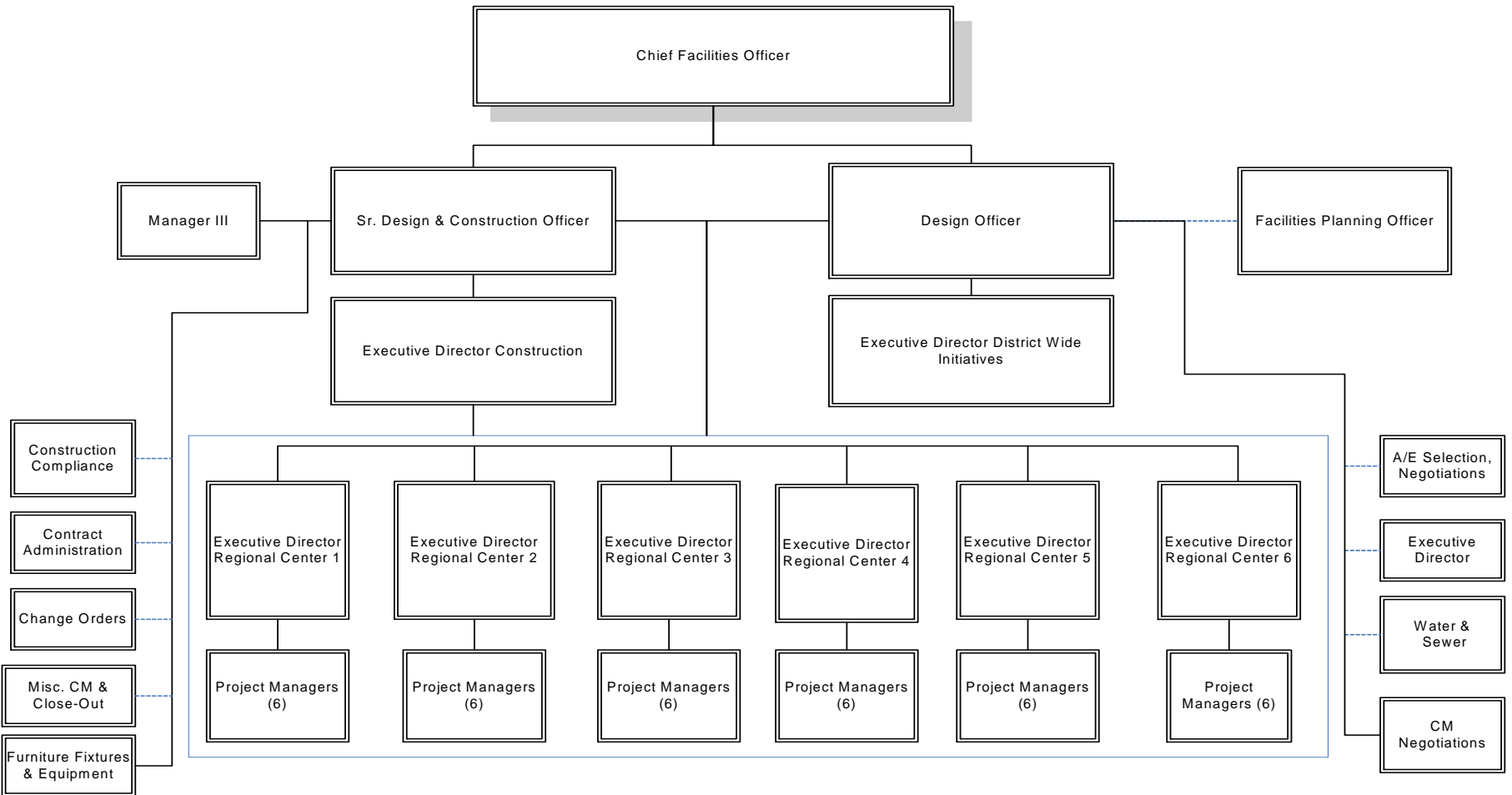
The management of change orders and contingency and allowance usages is primarily the responsibility of OSF, and also the responsibility of the contracted CM's and A/E's.

During the audit period, July 1, 2004 through March 12, 2008, the District conducted 199 major construction projects at a cost totaling approximately \$1.81 billion. The change orders associated with those projects totaled 294, as follow:

- \$22 million increase to GMP
- \$17 million decrease to GMP
- \$5 million return of unused owner's contingency
- 14,116 days increase to project duration.

There were also 2,000 contingency adjustments totaling \$34 million associated with those projects.

Office of School Facilities Partial Organization Chart



OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with the Audit Plan for the 2008-09 Fiscal Year, we have performed an audit of construction claims, allowances and contingencies usages. The objective of the audit was to determine the propriety of change order and contingency and allowance usages. This included determining whether amounts paid were justified; adequately documented to substantiate the cost; and properly authorized and executed prior to payment.

The scope of our audit covered construction projects, containing allowances and change orders, which were on-going or completed between January 1, 2004 and March 12, 2008. Procedures performed to satisfy the audit objective were as follow:

- Interviewed district staff;
- Reviewed operating policies and procedures, applicable Florida Statutes and State Board of Education Rules (SREF);
- Examined on a sample basis, project files, including GMP, allowance and contingency books, payment files and other applicable project correspondences;
- Surveyed other Florida school districts;
- Performed various other audit procedures as deemed necessary.

We conducted this performance audit in accordance with generally accepted Government Auditing Standards issued by the Comptroller General of the United States of America. Those standards required that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit also included an assessment of applicable internal controls and compliance with the requirements of policies, procedures and rules to satisfy our audit objectives.

FINDINGS AND RECOMMENDATIONS

1. UNNECESSARY INCREMENTAL COSTS WERE INCURRED FOR ADJUSTMENTS TO THE PROJECTS THAT CM'S WERE NOT ENTITLED TO

Section 6.4.2 of the Construction Manager At-Risk Agreement states:

“The CM shall, during this phase, be responsible for the proper identification and location of all utilities, services, and other underground facilities which may impact the project. The CM agrees specifically that no change orders shall be requested by the CM or considered by the Board for reasons involving conflicts in the documents, questions of clarity with regard to the documents, incompatibility or conflicts between the documents and the existing conditions, utilities, and unforeseen underground conditions.”

The OSF's standard CM at-Risk procedures manual, under the subsection titled Amendment Adjustments, further states that the CM agrees that there will be no changes for conditions which should have been foreseen as a result of his due diligence in performing his contract required site investigation.

Our audit test of 148 paid change items and contingency adjustments totaling \$5.7 million revealed that 5% or \$320,000 (\$298,000 change orders and \$22,000 contingency adjustments) were related to conflicts between contract documents and the existing conditions (see table below for examples).

Project Number /Name	Contingency Adjustment/Change Order Item	Amount	Reason Cited
00140200 Palm Lakes Elementary	To extend the contract completion date due to existing unforeseen mechanical and electrical systems conditions and utilities conflicts, and to reimburse the CM @ Risk for the cost of extended Builder's Risk Insurance.	\$178,483	Unforeseen Circumstances
00140200 Palm Lakes Elementary	CM @ Risk provided labor, material and equipment to furnish and install additional and different-than specified water and sewer piping accessories.	\$49,976	Civil Engineering Omission
00147000 Kensington Park Elementary	CM to provide labor, material and equipment to raise the height of electrical utility access ports due to existing underground conflicting duct bank. This includes fire alarm work, and stainless steel NEMA 4X disconnects for HVAC system cooling towers.	\$32,015	Fast Track / Coordinator Error
00147000 Kensington Park Elementary	Construction manager provided labor, material and equipment to reroute and extend the existing conflicting underground 6" diameter water main. This includes removal and replacement of existing sidewalk.	\$28,901	Unforeseen Circumstances

The OSF project closeout procedures manual and the standard CM at-Risk procedures manual both state that the CM agrees that there will not be any changes/change orders to the contract due to architectural errors and/or omissions. In the standard CM at-Risk procedures manual, this provision is under the subsection titled Amendment Adjustments.

Moreover, the construction Manager At Risk Agreement – GMP Amendment states that by executing the GMP Agreement, the CM acknowledges that it has ascertained all correct locations for points of connections for all utilities, if any, required for the project.

The audit found four (4) contingency adjustments, totaling \$408,000 and five (5) change orders, totaling \$135,000, compensating CM's for architectural errors and/or omissions. This suggests that staff could benefit from training in OSF's procedures and construction contract terms.

The CM is typically paid an amount for pre-construction services, such as, schedule, budgeting, and constructability reviews during the project design phase. During the design phase, and as part of the constructability review, the CM is supposed to explore the site conditions and work along with the A/E to coordinate the project's requirements. It is expected that apparent conflicts and constructability issues will be addressed and resolved during this phase.

There appears to be a greater financial risk to the CM compared to the project A/E, because Article VII. H., of the A/E contract holds the A/E harmless for their combined errors and omissions, up to 1½% of the project's total construction cost. The CM has no such safe-harbor. Cost increases resulting from A/E's errors and omissions, within the 1½% threshold, are not absorbed by the A/E, but are often inappropriately passed along to the District, via the CM. This is particularly unfair since the CM and A/E work together during the design phase of a project. In its recently published audit on the District's financial, operational, and Federal Single Audit, Florida Auditor General recommended that the School Board consider revising future A/E contracts to eliminate the 1½% errors and omissions allowance.³

There appears to be a lack of due diligence on the part of the District, the CM and the A/E, in properly identifying conflicts. As noted in our recently published audit of the District's capital construction program, management often awarded

³ Auditor General, David W. Martin, CPA, Miami-Dade County District School Board, Financial, Operational, and Federal Single Audit For the Fiscal Year Ended June 30, 2007, March 2008, Report No. 2008-158, pp.9-10.

construction projects with less than 100% completed construction documents, in conflict with School Board Rule 6Gx13-7B-1.10. Going forward, management agreed to only award projects with construction documents that are 100% completed.

We surveyed eight Florida school districts and received responses from four of them. The information received from the other four school districts was for comparable projects. We provided a general description of each project’s scope, size, construction type, costs, etc., to each school district surveyed and requested information about similar projects they completed. The following table of rates for contingency adjustments, allowances, and change orders are base on information provided by four school districts that responded to the survey:

Contingency Adjustments, Allowances, and Change Orders Rates For M-DCPS and the Surveyed School Districts									
	Contingency Adjustments			Allowances			Change Orders		
School Districts	High	Low	Avg	High	Low	Avg	High	Low	Avg
Miami-Dade	9%	1%	4%	28% ⁴	1%	10%	10%	(5%)	7%
Broward	4%	3%	3%	0%	0%	0%	5%	4%	5%
Orange	2%	.4%	1%	1%	0%	0%	2%	.21%	0%
Duval	4%	4%	4%	2%	1%	0%	4%	0%	1%
Lee	5%	2%	4%	0%	0%	0%	9%	(26%)	(12%)

The table shows that, in general, the ranges in each category are greater for M-DCPS than for the other school districts. M-DCPS has the highest rates in each category. This suggests that M-DCPS experiences a greater amount of increases to its construction projects’ costs than do the other school districts.

⁴ This is the highest rate experienced by the projects in our sample. However, in our recently published internal audit of the award and administration of construction projects at M-DCPS, a total allowance rate of 46% was noted for one project sampled. In responding to that audit, management asserted that for capacity projects costing over \$7 million and awarded during the 2006-07 and 2007-08 school years, the average allowance rates were 2.7% and 0.8%, respectively. For the 25 such projects listed by management, the highest allowance rate was 9.1%.

RECOMMENDATIONS

- 1.1 Adhere to the OSF's policies and procedures, and enforce Section 6.4.2 of the Construction Manager At-Risk Agreement by not compensating CM's for change order or contingency adjustment resulting from A/E errors and omission and conflicts in the documents, questions of clarity with regard to the documents, incompatibility or conflicts between the documents and the existing conditions, utilities, and unforeseen underground conditions.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

- 1.2 In line with the Auditor General's recommendation, eliminate the 1½% errors and omissions allowance from future A/E contracts in order to establish consistency with OSF's procedures and the CM's construction contract, and parity.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

- 1.3 Explore all efforts to recover monies for any change orders and contingency adjustments that resulted from conflicts in existing conditions due to A/E errors or omissions.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

- 1.4 Provide comprehensive training and guidance to staff on OSF's policies and procedures, and A/E and CM contracts.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

2. PROCEDURES TO VALIDATE ADJUSTMENTS PRICING AND TO MANAGE BONDING AND INSURANCE COSTS ARE INADEQUATE

Change orders and contingency adjustments are used when the District requests a change in scope or when an unforeseen condition surfaces, which the construction team determines necessitates a changes. A process, which may include developing cost estimates for comparison with amount proposed; and obtaining and reviewing supporting documentation of cost, including subcontract, invoices, vendor quotes, etc., to validate the cost of these items, typically provides greater cost control.

We sampled nine (9) projects with 93 change items totaling \$2.3 million and 55 contingency adjustments totaling \$3.4 million. Our review of the project files found that payments for \$1.6 million or 67% of change orders and \$1.3 million or 36% of contingency adjustments were not supported by subcontractors' invoices. As such, we were unable to validate the accuracy of the amount charged.

The level of management and verification of bond and insurance charges included in change orders and contingency adjustments is inadequate. Section 6.2.3 of the Construction Manager At-Risk Agreement requires the CM to furnish and maintain, at its own cost and expense, performance and payment bonds equal to the awarded GMP. When a project's GMP is increased through a change order, the CM is required to proportionately increase the various bonds and insurances and invoice M-DCPS for the additional premiums. Additionally, staff indicated to us that for M-DCPS' projects, the CM typically purchases a blanket bond in a set amount (GMP) at the beginning of the project, and can perform work up to the bonding limit. If the project costs exceed the initial limit, the CM provides a Rider to the original bond to increase the initial bonding amount or to extend the time.

The following conditions were noted:

1. For the 98 invoice-supported change orders and contingency adjustments included in the sample, there were 15 cases totaling \$17,597 where both the CM and trade subcontractor charged M-DCPS performance bond and builders risk insurance. This resulted in an overpayment of \$9,732. Additionally, there were 13 instances where the CM charged the District a total of \$7,808, for an additional bond called sub guard. Sub guard is a bond that protects the CM in the event that non-bondable subcontractors default. Moreover, in one instance, the

CM charged M-DCPS for the sub guard even though the related subcontractor was bonded.

2. The current practice governing the reimbursement of the CM's cost for payment and performance bonds is inconsistent with Section 6.2.3 of the Construction Manager At-Risk Agreement. That contract provision states that the CM is responsible for providing such bonds equal to the awarded GMP, at its own cost and expense. However, we found that not only is the CM compensated for payment and performance bonds costs and expenses on some change orders and contingency adjustments, but also when establishing the GMP.
3. There is no District process in place to verify that the amount of increased bond cost requested for reimbursement through change orders and contingency adjustments was in fact incurred by the CM or subcontractor. An invoice of actual payment by the CM or subcontractor is not requested when processing change order or contingency adjustments. A process to verify that the CM has exhausted its initial bonding limit, as evidenced by a Rider, prior to processing change order or contingency adjustments, is also not in place. There was approximately \$56 million in positive change orders and contingency adjustments to construction contracts awarded during the audit period. Based on the change orders and contingency adjustments reviewed, bond costs approximated between 0% and 3.37% of the cost of the underlying work. Therefore, as much as an estimated \$1.9 million could be subject to exposed risks.
4. While the CM is allowed to be reimbursed for increased bonding cost when the project value increases, through change order; there is no district process in place to monitor downward adjustments in bonding cost when the project value decreases via change order of scope changes. Consequently, savings returned to the CM resulting from policy adjustments are not tracked to ensure they are passed on to the District. It is a standard practice for a bonding company to review a project's costs throughout and at the end of the project and adjust the amount charged the contractor for bonding the project. In a number of instances, individual project GMP is adjusted downward via change order or contingency adjustments. For the projects awarded during the audit period, there were \$17 million and \$5.1 million decreases in project GMPs, via change orders and unused owner's contingency, respectively.

5. We found one instance in which the District was overcharged an additional \$19,110 in overhead and fees on Builders Risk insurance premium. The amount was charged to the District through a change order to reimburse the CM for extended Builders Risk coverage. The CM's direct cost, as presented in the change order was \$159,373, upon which he added a 1.81% (i.e., \$2,884) mark-up for overhead and a 10% (i.e., \$16,226) stacked mark-up for fees. The total amount paid on the change order was \$178,483.

Not having written procedures to govern the change order and contingency adjustment verification process, which are articulated for the OSF staff, could increase the District's exposure to possible over billings and inconsistent processing of change orders and contingency adjustments.

RECOMMENDATIONS

- 2.1 **Establish detailed comprehensive procedures for the review and approval of change orders and contingency adjustments to ensure that the amount paid are the best price and adequately supported by sufficient documentation.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

- 2.2 **Develop procedures to identify and recover any savings returned to the CM that resulted from adjustments to the CM's cost of bonding, due to decreases in the GMP. This should be applied to projects where M-DCPS compensates the CM for bonding costs.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

- 2.3 **Pursue reimbursement of amounts overpaid to CM for bond costs and insurance premium.**

Responsible Department: The Office of School Facilities

Management Response: See Attachment

3. USE OF PROJECT ALLOWANCES ARE NOT ALWAYS ADEQUATELY DOCUMENTED, RECONCILED OR COMPETITIVELY PRICED

Allowances are estimates included in the awarded GMP. These amounts are for portions of the project's scope that might not be adequately defined and for which pricing might not be readily available at the time of negotiating the GMP. Staff stated that allowances are also established for anticipated work.

In a number of cases, allowances appear to be another layer of project contingency, which the CM has available to it, and an area through which cost overruns could be absorbed. Consequently, there is a need to have in place procedures to manage the use of allowances. Such procedures were not in place during the conduct of the audit. Subsequent to the completion of our fieldwork, we were provided a copy of draft procedures intended to manage the use of allowances. The draft procedures are adequate, and when implemented, would likely provide some assurance that the District is getting competitive prices for the needed items.

In reviewing the use of the 92 allowances, totaling \$4,123,000, awarded in the GMPs of the nine (9) sample projects tested, we found the following:

- Approved allowances totaling \$1,080,000 or 26% were not used for their intended purposes. The amount in question was used by the CM to cover other project cost shortfalls. Moreover, while the CM presented summary information claiming that another \$2.6 million or 63% of the approved allowances reviewed were used for their intended purposes, the information presented was insufficiently detailed or supportive to enable us to validate the CM's claims.
- There was no documented evidence found to support the use or return of \$276,000 or 7% of the approved allowances.
- The "CM Project Reconciliation Binders" are supposed to document and support the use and reconciliation of allowance and contingency. While staff provided the "CM Project Reconciliation Binders" for four (4) of the eight (8) applicable sampled projects⁵, binders for the remaining four (4) projects were not provided for audit. Additionally, only one of the four (4) binders received

⁵ One of the nine projects sampled was a design-build project and would not have a reconciliation binder due to its project delivery method.

contained adequate documented evidence to support the pricing and proper approval for the use and subsequent reallocation of the unused allowance. The remaining three (3) binders contained some documents related to the allowances, but none adequately documented how much of the allowances were used. For example, there were no subcontractor's and supplier's invoices, delivery ticket, subcontractor payments, etc.

- A total of \$167,000 or 4% was returned to the District via credit change orders.

The audit also found no evidence of competitive pricing, at the time of using the allowances, for 52% of the allowances tested.

RECOMMENDATION

3.1 Amend the draft procedures to better manage the use of project allowances to include specific guidance on the type of documentation that must be submitted to validate their use and implement the draft procedures as soon as they are finalized.

Responsible Department: The Office of School Facilities

Management Response: See Attachment

Attachment – Management Response

MEMORANDUM

January 21, 2009

TO: Mr. Allen M. Vann, Chief Auditor
Office of Management and Compliance Audits

FROM: 
Jaime G. Torrens, Chief Facilities Officer
Office of School Facilities

**SUBJECT: ADMINISTRATIVE RESPONSE TO INTERNAL AUDIT OF
CONSTRUCTION CLAIMS, ALLOWANCES AND CONTINGENCIES**

Attached is the Administrative Response to the Internal Audit of Construction Claims, Allowances and Contingencies.

If you have any questions, or need any additional information, please feel free to call me.

JGT:cb
M143

Attachments

cc: Mr. Alberto M. Carvalho
Mr. Trevor Williams

**MANAGEMENT REPOSE
TO
INTERNAL AUDIT REPORT: CONSTRUCTION CLAIMS,
ALLOWANCES AND CONTINGENCIES**

**OFFICE OF SCHOOL FACILITIES
JANUARY 2009**

EXECUTIVE SUMMARY

Background

The District's ambitious building program to address the severe overcrowding of schools and meet the constitutionally mandated class size reduction requirements coincides with the audit period of July 1, 2004 to March 12, 2008 for the Audit of Construction Claims, Allowances and Contingencies. This accelerated building program, implemented by the Office of School Facilities, (OSF), and approved by the School Board, has resulted in the construction of 29 new schools and over 84,000 new student stations since August 2004.

To accomplish the ambitious goals of the accelerated building program, OSF implemented a strategic business approach and organizational changes to address external market conditions and streamline internal processes. Among the strategies directed by the then Chief Facilities Officer were the following:

- **Exclusive use of Construction Manager at Risk Delivery Method:** This provided the opportunity for "fast-tracking" or overlapping design and construction phases to accelerate construction schedules.
- **Prototype School Designs and Modular Additions:** Over 100 capacity projects have been awarded with prototypical design adaptations realizing a savings of over \$40 million in design fees and accelerating the delivery of projects by an average of one school year. (Notably, this audit sampled nine projects of which eight were modular addition projects).

Significant challenges arose during the implementation of the accelerated building program, resulting in the then Chief Facilities Officer directing the extensive use of less than 100% complete design documents and extensive reliance on allowances at the time of GMP (Guaranteed Maximum Price) negotiations. The following adverse conditions coincided with the accelerated building program:

- **Skyrocketing Construction Costs:** From 2004 to 2007 construction costs almost doubled nationally as a result of increases in fuel, steel, concrete, and wood along with the increased demand of raw materials globally.
- **Local Market Conditions in the Construction Industry:** A local building boom from 2004 to 2007 coincided with the District's construction program, creating a scarcity of skilled laborers in the work force.
- **Impact of the 2005 Hurricane Season:** Miami-Dade County was directly impacted by three hurricanes in the summer and fall of 2005, straining the available work force and raw materials. The loss of electricity for several

weeks impacted projects scheduled to be awarded for construction and completed by August 2006, necessitating the extensive use of allowances, diminishing the time available for pre-construction site investigation and shortening the timeframes to complete drawings and plan reviews.

- **Property Insurance Crisis:** Due in great part to the devastating 2005 hurricane season and its impact on the property insurance market in the State of Florida, builder's risk and windstorm insurance became difficult to secure and prohibitively expensive.

Commencing in February 2007, a fundamental shift in the design process and project negotiations was implemented and is currently in use. The new Chief Facilities Officer directed that plans be at or near 100% completion prior to bidding and negotiating projects, resulting in significant and immediate reductions in GMP allowances. As a consequence, there was a significant and immediate reduction in GMP allowances which in the fiscal year 2007-2008 averaged less than 1% of the GMP amounts. Complete design documents also reduced project risk since site investigations of existing conditions were performed prior to negotiations. Fewer unforeseen conditions led to better cost controls. Overall project costs stabilized and even declined slightly as a result of this approach and the leveling of external market conditions.

Summary Audit Findings

The audit report states on page 5 that during the audit period of July 1, 2004 to March 12, 2008 approximately \$1.81 billion of construction was awarded among 199 major construction projects. Nine projects were sampled in the audit report totaling \$59.1 million construction cost. Eight of the nine projects sampled were modular classroom additions at existing school sites and six of the nine were awarded and began construction in the Fall of 2005, the peak period of the accelerated building program which was dramatically impacted by the three hurricanes which hit Miami-Dade County.

The audit report states that a total of 294 change orders were processed during the audit period with \$22 million of change order increases and \$22 million of change order decreases or credits, resulting in a remarkable net \$0 change orders during the period of \$1.81 billion of construction awards.

Furthermore, a total of 2,000 contingency adjustments totaling \$34 million averaged 1.9% of the total GMP awarded amounts. This is well within the industry average of 5% for CM projects intended to have full 100% documents. An analysis of the nine projects sampled (eight of which are modular additions) indicates an average change order amount of 3.8% and allowances included at

the time of GMP negotiations of 7.4%. Given the circumstances of the accelerated building program, the use of incomplete design documents and accounting for the fact that one of the sampled projects, Palm Lakes Elementary School, having an uncharacteristically high allowance rate of 28%, by industry standards the average rate of the nine sampled projects is remarkably low.

Additional references are made in the audit report to the following issues:

“Written policies and procedures are in need of enhancements.” The OSF agrees that further enhancements of written policies and procedures are needed, including:

1. Procedures for the use of allowances were completed and incorporated in current projects.
2. Additional ongoing training of project managers will be conducted to ensure the consistent application of policies and procedures, including any newly developed procedures resulting from this audit.
3. Written procedures for bonding requirements and architect/engineer’s errors and omissions will be reviewed with Risk Management and the School Board Attorney’s Office to clarify or correct any inconsistencies.

“Change orders and contingency adjustments totaling \$319,882 were approved where conflicts existed between drawings and existing underground conditions.” All procedures and construction contracts were developed with the intent of utilizing 100% documents. The specific examples cited in the audit report occurred at the peak of the District’s accelerated building program on projects commissioned with incomplete documents and limited site investigative periods due to time constraints. Reviews of the change orders by the entire project team as well as other OSF staff and committees, concluded that the specific conditions were not reasonably foreseeable by the CM at the time of GMP negotiations and therefore compensable.

“Change orders totaling \$542,382 were approved despite being caused by architect/engineer errors and omissions.” The quoted language in the audit report has omitted wording in the CM at-Risk Procedures Manual which refers to “plan coordination conflicts” due to A/E errors and omissions not being compensable. Upon review by OSF staff, it has been determined that the text of the Procedures Manual contains an error which causes this internal document to be inconsistent with the District’s official contracts. The Closeout Procedures Manual inadvertently left out the words “plan coordination conflicts” and will be corrected.

“The District was overcharged \$36,650 for project bonding cost in change order calculations.” District policy and State Statutes require that a

performance bond be provided for construction services. The CM includes the cost of the bond at the time of GMP negotiations as part of the cost of performing the work. Additional bond costs are included in change orders and contingency adjustments, in accordance with the conditions at the time of the GMP negotiations and in addition to the initial bond cost included in the GMP. Alternative approaches to the application of the bond costs will be reviewed with Risk Management and the Board Attorney's Office to consider the most cost effective methods for obtaining bonds.

“Ensure that the unused portions of allowances are refunded and that allowances are competitively bid.” Any unused portions of allowances are routinely processed as credit change orders during the financial closeout of projects. At the time of this audit response, some of the nine projects sampled have yet to be closed out. Allowances are competitively bid to the extent possible during construction, depending on the nature of the work. A full landscape package, for example, is easily bid to various landscapers during the course of construction for a competitive bid. On the other hand, the upgrading of an existing fire alarm system at a school is normally integrated with other major electrical components of the project and is not practical to bid out due to overlapping responsibilities and warranty issues.

The audit report cites additional findings that are addressed in detail on the following pages. In many instances practices and procedures had been changed prior to the audit and are consistent with the auditors' recommendations. Other recommendations have been implemented since the audit. In some instances, OSF staff disagrees with the auditors' recommendations for the reasons explained in the management response. Nevertheless, the extensive efforts of both OSF and Management and Compliance Audits staff with regard to this audit have yielded a mutual appreciation for the functions and responsibilities of the respective offices.

Response to Finding #1
“Incremental Costs Incurred for Adjustments to the Projects”

OSF concurs that some of the change orders on these projects could have been avoided if not for the above mentioned exigent circumstances existent at the time of their design and construction. In spite of these circumstances, all of these change orders were determined to be appropriate and necessary and the CM was entitled to payment of these costs pursuant to the Board approved CM at-Risk Agreement and construction documents. No change orders were approved nor was the CM paid for any conflicts due to existing underground conditions that were foreseeable based on the partially completed construction documents available to the CM at the time of GMP approval. Had the construction documents been fully completed and had full site investigations been able to be performed prior to GMP approval, these costs would have been included in the GMP rather than being added to the GMP by change order. While some minor costs savings might have been possible, the overall cost to the District for these projects would have been virtually the same.

The projects examined in the report were predominately modular building additions delivered at a time of extremely exigent circumstances with highly accelerated delivery schedules to reduce severe overcrowding, meet constitutionally mandated class size reduction and the District’s highly aggressive Strategic Plan to deliver new student stations. These schedules were further compressed by the occurrence of three hurricanes during the design and pre-construction stages of these projects. In order to meet projected occupancy dates and delivery of required new student stations, the GMPs for most of these projects were based on incomplete construction documents (i.e. 50% or less plans and specifications). Both time and access to existing facilities, necessary for the CM to perform its due diligence (including full and appropriate site investigations) was restricted resulting in limited and/or abbreviated pre-construction services. Modular building additions were being constructed at existing occupied facilities, some of which were over 50 years old. The demolition and removal of existing occupied buildings to allow for thorough investigation of existing underground conditions was not possible or timely. In some instances, as-built information and drawings were not accurate or were missing altogether. Had the time been taken to fully investigate and verify all site conditions and fully complete the construction documents, these facilities would not have been occupied on time by thousands of students.

Article 6.4.2 of the CM at-Risk Agreement is dependent upon other related provisions of the agreement, including article 6.4.1 Review of Design Documents, in that the CM is to review the construction documents and coordinate them with existing conditions at the site so as to minimize conflicts due to unforeseen conditions. That provision is contingent on having 100% completed construction documents at the time of review by the CM so that careful and accurate coordination between those documents and existing site conditions may be undertaken effectively and reasonably. In large part, true and reliable information regarding existing underground conditions on these projects was not available until long after the GMP was awarded. As such, at the time of approval of the GMP by the Board, it was not possible to ascertain definitive fixed prices for certain portions of the work. While the GMP pricing for the modular prototype buildings themselves, was known and fixed, the pricing for the sitework and utilities portions of these projects was largely unknown and quantifiable at the time of GMP approval. Allowances were established for these scopes of work so that the GMPs would not be overly inflated to account for these unknown conditions until such time as accurate costs could be determined based on known actual conditions and completed construction documents

The statement in the audit report that “there will be no changes for conditions which should have been foreseen as a result of his due diligence in performing his contract required site investigation” is not an accurate restatement of the language contained in the OSF standard CM at-Risk Procedures Manual. The OSF standard CM at-Risk Procedures Manual and Article 6.4.2 of the CM at-Risk Agreement both use the words “change orders”, not changes. By definition, a change order results in a change to the GMP amount or time and does not refer to contingency adjustments, which do not result in a change to the GMP amount or time. With regard to all such related provisions, there is an expectation of reasonableness in connection with the due diligence undertaken in performing site investigation. Due to the extenuating circumstances described above and based on the specific conditions bearing on the change order items themselves, it would not be reasonable or possible to hold the CM responsible for strict adherence to the language quoted in the audit report from Article 6.4.2 of the Construction Manager (CM) at-Risk Agreement in all instances. The OSF standard CM at-Risk Procedures Manual does provide clarification of the intent of the CM at-Risk Agreement, in that the CM will not be entitled to any “Change Orders” for conditions which should have been foreseen as a result of his due diligence in performing site investigations. Also, the OSF standard CM at-Risk Procedures Manual is intended for internal use by MDCPS staff and certain of the provisions of that document are not contained in the CM at-Risk Agreement itself.

Responses specific to the four items included in the table shown in the audit report are provided below. Again, with regard to the breakdown of costs and overall figures stated in the paragraph preceding the table, both Article 6.4.2 of the CM at-Risk Agreement and the corresponding language in the OSF standard CM at-Risk Procedures Manual pertain to “change orders”, not contingency adjustments.

00140200 Palm Lakes Elementary (1st item):

This project was a modular classroom addition at an existing occupied educational facility. In order to properly investigate the existing underground conditions at this facility, existing buildings and other portions of the existing facility needed to be demolished or removed. Those portions of the existing facility (i.e. relocatable classrooms and parking areas) were being occupied or used during that time and could not be demolished or removed without severely disrupting the ongoing educational operations. As a result, and due to the aggressive schedule for this project, the design and construction documents for the sitework for those portions of the facility were not able to be completed. Therefore, the CM was not able to properly investigate significant portions of the existing site and coordinate them with the construction documents at the time of pre-construction services and prior to the approval of the GMP Amendment.

Further complicating the project, the original site planning assumed that the existing relocatable classrooms were to be removed from the school site and the students absorbed within the existing facilities. This was based on discussions with the then principal, however, an ensuing change of principals in the Fall 2006 resulted in a change of plans as the new administrator determined that the students could not be absorbed within the facility and most of the relocatable classrooms had to remain in place. Consequently, an extensive redesign of underground utilities and construction delays occurred.

This item was initially submitted by the CM as a major claim totaling \$565,483.00, with a time extension request of 191 days. The compensation asserted in the claim was predominately for extended on-site general conditions costs. Several months of discussion and

negotiation ensued resulting in the significantly reduced final change order amount of \$178,483 and 125 days of time extension. This compensation was limited only to the cost of providing extended builder's risk insurance. The availability of builder's risk insurance during this time period was extremely limited, if available at all, and costs for available coverage had increased significantly. Also, this was at a time prior to the District having implemented its own builder's risk insurance program which has since tremendously reduced the costs of providing this coverage. To be certain that the cost to extend the builder's risk coverage was reasonable and accurately reflected market costs, this item was also reviewed and analyzed by MDCPS' Risk Management Department, which found the additional premium costs to be fair and reasonable for the extended coverage period.

00140200 Palm Lakes Elementary (2nd item):

At the time of GMP approval, the construction documents for site and civil work were incomplete and pre-construction services were limited and/or abbreviated. The engineering changes to the construction documents related to the sizing of the water and sewer piping systems which occurred after the GMP was approved. This item was categorized by staff as a civil engineering omission due to later changes in the design by the A/E. Based on a review of the contract documents (i.e. drawings, specifications and applicable provisions of the contract) by MDCPS' construction staff (including the project manager and three higher tiers of MDCPS construction staff), the project A/E, Facilities' Agenda Review Group and the Technical Review Committee, it was determined that this work could not have been reasonably inferred from the Contract Documents and that the CM was entitled to be compensated for that additional work. As explained later in this response, the CM at-Risk Agreement does not require the CM to be responsible for absorbing any and all costs to perform additional work due to A/E errors and omissions.

00147000 Kensington Park Elementary (1st item):

The item as described in the audit report was not a change order under GMP for Project Number 00147000 as stated in the audit report. The item as described in the audit report was a change order under a separate, GMP for Project Number 00147003, Site Package for Modular Classroom. The amount approved for that item was \$18,476, not \$32,015 as stated in the audit report. The amount of \$32,015 indicated in the audit report was for a different change order item. The item as described in the audit report

was categorized by staff as a “Fast Track / Coordinator Error” and was due to the site and civil engineering documents not being fully completed at the time of execution of the GMP Amendment. At the time of GMP approval, existing buildings and parking areas that were planned to be demolished were still being occupied or used. As such, a full investigation of existing underground conditions was not able to be conducted prior to GMP approval. Based on a review of the contract documents (i.e. drawings, specifications and applicable provisions of the contract) by MDCPS’ construction staff (including the project manager and three higher tiers of MDCPS construction staff), the project A/E, Facilities’ Agenda Review Group and the Technical Review Committee, it was determined that this work could not have been reasonably inferred from the construction documents available when the GMP was approved and that the CM was entitled to be compensated for that additional work.

00147000 Kensington Park Elementary (2nd item):

At the time of GMP approval for this project, the construction documents for the site and civil work were incomplete and pre-construction services were limited and/or abbreviated. As such, this item was categorized by staff as a “Fast Track / Coordinator Error”. Based on a review of the contract documents (i.e. drawings, specifications and applicable provisions of the contract) by MDCPS’ construction staff (including the project manager and three higher tiers of MDCPS construction staff), the project A/E, Facilities’ Agenda Review Group and the Technical Review Committee, it was determined that this work could not have been reasonably inferred from the construction documents available when the GMP was approved and that the CM was entitled to be compensated for that additional work.

Although the definition of contingency contained in the CM at-Risk Agreement is intended to be used primarily to pay for additional work that was not foreseeable by the CM, virtually all of the contingency adjustments processed for these projects were categorized as “Scope Change”. The contingency was utilized for these scope changes to avoid delay in occupying the new buildings for the reasons described above. Although the contingency may not be primarily intended to address scope changes, its use for scope changes is not specifically prohibited under the CM at-Risk Agreement. As a result of the contingency being consumed by scope changes, insufficient contingency funds remained to address

any unforeseen conditions and/or utilities conflicts at the time those items arose. Had the scope change items been processed as change orders instead of contingency adjustments, sufficient contingency funds would have been available to pay for the unforeseen/conflict items as intended in the CM at-Risk Agreement. Therefore, notwithstanding the fact that these unforeseen/conflict items were processed as change orders instead of contingency adjustments, the District did not incur any additional costs nor pay the CM for anything it was not entitled to receive in accordance with the Agreement.

The language quoted in the audit report as being from the OSF standard CM at-Risk Procedures Manual has omitted the words “plan coordination conflicts” that actually appear in the text of that document. The language stated in the MDCPS Procedures Manual for Construction Management at-Risk states: “The CM agrees that there will not be any Change Orders (*emphasis added*) for Plan Coordination (*emphasis added*) conflicts due to Architectural Errors and /or Omissions.” The OSF project closeout procedures manual states that there will not be any “changes to the contract” due to architectural errors and/or omissions (without the words “Plan Coordination”). Although the wording in the two documents differs slightly, both convey essentially the meaning that “changes to the contract” and “Change Orders” are the same (i.e. that each change the GMP amount or contract time) which is not the case for contingency adjustments. And, that the CM will not be entitled to “Change Orders” due to “Plan Coordination” conflicts due to Architectural Errors and/or Omissions. The language contained in article 6.4.2 of the CM at-Risk Agreement regarding “conflicts in the documents” is generally consistent with the language in the CM at-Risk Procedures Manual as stated above, in that it is the responsibility of the CM, as part of its review of the construction documents, to properly coordinate the construction documents and to ascertain conflicts between the construction documents and existing conditions. As such, these two documents will need to be revised due to the slight differences in the language contained in them as well as to be consistent with and more accurately reflect the requirements of the CM at-Risk Agreement. Again, as stated above, these documents are intended for internal use by MDCPS staff and certain of the provisions of these documents are not contained in the CM at-Risk Agreement itself.

It would not be consistent with the provisions of the CM at-Risk Agreement to say that the CM shouldn't be entitled to change orders or contingency adjustments due to any and all A/E errors and/or omissions, particularly those not simply involving “plan coordination conflicts”. For example, it would not be reasonable to expect the CM be held responsible for additional costs to increase the reinforcing steel in a reinforced concrete beam due to the structural engineer having miscalculated or undersized the reinforcing steel.

The points of connection for utilities rely largely on the needed capacities as designed and calculated by the design professional (i.e. the Project A/E of Record) and are affected by variations in building configuration imposed by differing site conditions. That particular expertise, professional knowledge and responsibility is solely that of the A/E of Record, not the CM. Moreover, Article 6.3.1 makes it clear that the responsibilities of the CM and A/E are to be rendered compatibly and it is not intended that the services of the Design Professional and the CM be competitive or duplicative, but rather be complementary. Article 6.3.1 also states that nothing in this Agreement shall be construed to mean that the CM assumes any of the responsibilities or duties of the Design Professional and that the Design Professional is responsible for the requirements of the Project as indicated in the agreement between the Design Professional and the Board. Depending on the nature of the change order or contingency adjustment, the professional knowledge, expertise or intent of the contract documents may be beyond the expertise of the CM, who is solely responsible for construction means, methods, techniques, sequence and procedures used in the construction of the Project as stated in the CM at-Risk Agreement. As such, the suggestion made in the audit report that the CM should somehow be held responsible for the additional costs due to any and all A/E errors and omissions is unfounded and unreasonable. Furthermore, statements in the audit report that the 1-1/2% errors and omissions threshold be eliminated bears no relationship to the issue of holding the CM responsible for all additional construction costs due to A/E errors and omissions.

As indicated above, each of these items was reviewed and determinations were made involving professional and experienced MDCPS staff including project managers and three higher tiers of MDCPS construction staff, the project A/E, Facilities' Agenda Review Group and the Technical Review Committee before the item is finally approved or recommended to the Board for approval. There are no explanations or analyses provided as to the particular nature or circumstances related to the items referred to in the audit report, other than restating the words "conflict" or "conflicting" that appeared in the wording of the items. Furthermore, OSF's position is that each of these items was reviewed and approved in accordance with the requirements of the contract and that any "apparent" conflicts and constructability issues were addressed during the pre-construction phase.

The highest percentage figures indicated in the table on page 10 of the audit report are for single projects delivered under exigent and exceptional circumstances and are in no way representative of the overall percentages of contingency adjustments, change orders and allowances for MDCPS projects.

Further, the percentages indicated for single projects are by definition not statistically significant with regard to the overall capital construction program. Because no information has been provided for the purportedly similar projects from the four other school districts, it is not possible to review the actual items themselves and related documents, circumstances and facts to determine whether or not the percentages of change orders and contingency adjustments bear any meaningful correlation, whether factual or statistical, to unique single MDCPS projects. Due to the lack of context regarding unverifiable/unaudited data for “similar projects” provided by other school districts, OSF staff disputes the relevance of the table and considers its inclusion in the audit report to be inappropriate, misleading and inflammatory.

The Palm Lakes Elementary project (having the 28% allowance rate) accounts for over 55% of the overall amount of allowances for the projects cited in chart. Setting aside that project, the average allowance rate overall for the projects cited is less than 3.9% and it is 7.4% including that project. With regard to the footnote in the report of a project with a 46% total allowance rate (which is a previous finding repeated from the prior audit on Award and Administration of Construction Projects) OSF’ previous response had indicated that the percentage rate of allowances was incorrectly calculated and exaggerated the actual percentage. Also, as indicated in OSF’ response to the previous audit report, OSF concurred that certain percentage rates for allowances were higher than desired. As further indicated at that time, OSF had already taken decisive action (including but not limited to requiring that construction documents be fully completed prior to GMP approval) which resulted in significant reductions in percentage rates for allowances overall, from an average of 2.5% for projects awarded in 2006-07 down to 0.8% for projects awarded in 2007-08 (see Exhibit #5). Significant reductions in percentages for change orders since the time of these projects were also provided in management’s response to the previous audit report.

Finally, while this audit report addresses certain specific aspects and details of change orders, contingencies and allowances for certain projects, those matters and the circumstances surrounding them were already addressed in the previous audit report and management’s responses thereto were directly pertinent to the findings the previous audit report as well as this audit report.

RECOMMENDATION 1.1: OSF staff members have in the past and will continue in the future to stress to project management staff and its A/E firms the utmost importance of enforcing the provisions of the CM at-Risk Agreement, particularly with regard to not compensating the CM for conflicts in the documents, questions of clarity with regard to the documents, incompatibility between the documents

and existing conditions, utilities, and unforeseen underground conditions. Based on reviews of the change order items by an experienced and professional project team (including the MDCPS project manager and three higher tiers of construction staff) the project A/E, Facilities' Agenda Review Group and the Technical Review Committee, the specific facts and circumstances surrounding each item and the applicable provisions of the contract documents (i.e. drawings, specifications and applicable provisions of the contract), it was determined that the CM was entitled to be compensated for those change orders.

As indicated in management's responses above, it is staff's position that no change orders were approved nor was the CM paid for any conflicts due to existing underground conditions that were foreseeable based on the partially completed construction documents made available to the CM and limited and/or abbreviated pre-construction services performed at the time of GMP approval for these projects. OSF is in the process of conducting additional training sessions for staff and others, covering the provisions of the contract documents and enforcement thereof.

RECOMMENDATION 1.2: As stated above, the matter of holding the CM responsible for additional costs due to any and all errors and omissions on the part of the design professional would not be consistent with the provisions of the CM at-Risk Agreement. Also, a determination of whether or not to remove the 1-1/2% threshold for A/E errors and omissions currently set forth in the A/E Agreement, bears no relationship to the responsibilities of the CM as set forth in the CM at-Risk Agreement related to A/E errors and omissions. As stated in management's response to the audit findings above, OSF will be revising its standard CM at-Risk and Close-Out Procedures Manuals to remove the inconsistencies and so that they more accurately reflect the provisions of the CM at-Risk Agreement, particularly with regard to the CM's contractual responsibilities. OSF disagrees with the recommendation that the 1-1/2% threshold provision be eliminated from the A/E Agreement because as explained fully in prior audit responses, such a provision is in the best interest of the District. In fact, OSF considers the threshold to be a best business practice that is in use or under consideration by other large Florida school districts.

For more detail regarding the rationale for that position, please refer to the response previously provided to the Auditor General's office (Exhibit #1). In addition, this issue was discussed recently at the Tri-County School Facilities meeting between Palm Beach, Broward and Miami-Dade counties public schools officials. Currently, Palm Beach uses a threshold percentage for A/E errors and omissions in its A/E Agreements and staff indicated that it was very satisfied with that provision. Broward County indicated that it was in the process of developing a similar threshold provision.

RECOMMENDATION 1.3: As indicated in the response to the audit report findings and Recommendation 1.2 above, it is OSF' position, based on the facts and circumstances stated, that the CM was entitled to the compensation it received for the change orders cited in this audit report. As such, recovery of monies paid to the CM for the change orders cited in this audit report would not be a consideration at this time. However, the OSF, in collaboration with the Office of Management and Compliance Audits, is actively in the process of auditing other larger projects to determine if there were any irregularities on those projects. The District will pursue recovery of any costs paid to any CM that it was not entitled to receive.

RECOMMENDATION 1.4: As indicated in management's response to Recommendation 1.1 above, OSF is in the process of conducting training sessions for staff and others, covering the provisions of the contract documents and enforcement thereof. OSF management regularly provides guidance to its staff and will continue to stress the importance of these matters at weekly staff meetings and at Agenda Review Group and Technical Review Committee meetings at which these particular items are reviewed and approved.

Response to Finding #2

“Procedures to Validate Price Adjustments and to Manage Bonding and Insurance Costs Are Inadequate”

As stated in this section of the audit report, change orders and contingency adjustments are typically used whenever a change in scope or an unforeseen condition arises. It should be clearly understood that procedures to ensure adequate cost controls for the processing of change orders and contingency adjustments have been in place for many years (including the period covered by this audit report). In fact, the report references these policies and procedures in its Executive Summary (see Paragraph 3 of Executive Summary). These procedures are strictly adhered to by OSF staff in its review and approval of all change orders and contingency adjustments.

Proposed change orders and contingency adjustments are initially reviewed and evaluated by the project team (i.e., project manager, project architect and other consultants). Typically, the CM is required to provide subcontractor price breakdowns and other supporting documentation as part of its request for change orders and contingency adjustments. In the event of unusually large change orders or contingency adjustments, the project team may also request

that it be reviewed by an independent estimating consultant to verify whether the cost of the work is within industry standards. Each proposed change order and contingency adjustment is further reviewed and evaluated by OSF supervisory staff before being submitted to various tiers of review committees to ensure that they are necessary, fair and equitable. Finally, in the case of change orders, the proposed contractual change is also reviewed and recommended for approval by the Facilities and Construction Reform Committee, before ultimately being approved by the Board.

The audit report states that out of 93 change items and 55 contingency adjustments reviewed for the nine (9) sampled projects, approximately \$1.6 million of change order payments and \$1.3 million of contingency adjustments were not supported by subcontractors' invoices. However, it should be understood that there may be instances where the requested change order or contingency adjustments are deemed necessary and appropriate by the project team either by the very critical nature of the proposed work involved or the team's detailed knowledge of the scope of work included in the proposed change. In those instances, there may be sufficient documentation submitted by the CM (other than actual subcontractors' invoices) and/or cost/scope of work analysis performed by the project team, which may serve to justify the proposed change order or contingency adjustment price. It should also be understood that the CM normally submit proposal requests rather than invoices since the work is typically submitted for authorization to proceed. It is important to note that the total cost of change orders (i.e., \$1.6 million) and contingency adjustments (i.e., \$1.3 million) in question represent approximately 2.3% and 1.8%, respectively, of the total value (\$70,883,567) of the nine (9) sampled projects. These ratios are well within industry standards.

The audit report also asserts that the level of management and verification for bond and insurance charges included in change orders and contingency adjustments is inadequate. However, as stated above, the policies and procedures in place for the review and approval of proposed change orders and contingency adjustments already require that all cost items which are part of any change order and contingency adjustment (including the cost of bonds and insurance) be thoroughly reviewed and evaluated prior to approval. These policies and procedures are closely adhered to by OSF staff; therefore OSF strongly disagrees with the assertion that the level of management and/or oversight of these charges are inadequate for the following reasons.

1. Specifically, the audit report cited 15 instances where change orders included both CM and trade subcontractor charges for bond and builders risk insurance. The report also cited 13 instances where a sub-guard bond was also charged.

However, the practice of both the CM and subcontractors providing bond for public school construction projects is an acceptable, and to a large extent, beneficial industry standard. Among the many reasons for this is that bonded subcontractors are typically more reputable, stable, high performing companies, which provide a greater degree of reliability and higher quality work than other non-bonded firms. The CM's use of a bonded sub-contractor typically results in an overall savings to the cost of the CM's primary bond, which in turn results in greater savings to the project. The use of sub-guard bond by the CM is also an acceptable and often times beneficial practice since the CM can typically achieve a much more favorable (less expensive) rate for bond coverage than individual subcontractors and can thereby reduce the total performance bond cost attributable to the respective projects. Therefore, OSF disagrees with the audit's assertion that the District overpaid for the cost of bonding on the sampled projects. On the contrary, staff believes that in the absence of the subcontractor bond and sub-guard coverage, the charges incurred by the District for the sampled projects would have been greater.

2. The use of public construction performance bonds for school construction projects is required by both State law and Board rule. The cost of the bond is a necessary and justified cost of work for each major capital project (State law does allow for certain minor miscellaneous projects not to carry performance bonds) and is always included in the CM's overall cost of the awarded GMP for each applicable project. To imply that the cost of these bonds should be assumed by the CM at its own cost and expense, as suggested in the audit report, runs contrary to what is the generally accepted industry standard and is a misinterpretation of the intent in the language contained in Section 6.2.3 of the District's CM at-Risk agreement. Therefore, OSF respectfully disagrees with the audit report's assertion that the current practice of compensating the CM for the cost of payment and performance bonds is inconsistent with any section of the District's CM at-Risk agreement. As stated in Paragraph 1 above, OSF also disagrees with the audit's assertion that compensating CM firms for the cost of payment and performance bonds on the sampled projects was in any way inappropriate or inconsistent with any section of the District's CM at-Risk agreement.
3. The audit report asserts that there is no process in place to verify that the amount of increased bond cost requested for reimbursement in change orders and contingency adjustments was in fact incurred by the CM or subcontractor. It further asserts that an invoice of actual payment by the CM or subcontractor is not requested when processing change orders or contingency adjustments. However, it needs to be understood that in most instances, it is simply not feasible for the CM and/or subcontractor to submit an invoice evidencing proof

of payment for additional bond cost prior to the District's processing of change orders and/or contingency adjustments. Such a requirement could potentially delay the change order approval process and eventually affect the timely completion of the project. Moreover, the increased bond cost cited in the audit report (i.e., 0% to 3.37%) is within industry standards for such work and were part of the additional cost attributable to the respective change orders and/or contingency adjustments. Nonetheless, staff will be reviewing this process with the District's Risk Management and Board Attorney's Office to determine whether other viable options can be implemented regarding this finding.

4. The audit report also asserts that there is no process in place to monitor downward adjustments in bonding cost when the project value decreases via change order for scope changes. However, it appears that the report has not taken into consideration that downward adjustments in the value of any GMP (i.e., scope changes) are a negotiated amount which also include bonding costs. It should be pointed out that there are instances where a project GMP may be decreased and yet it does not affect the initial cost of the bond (e.g., credit change orders for materials purchased as part of the District's Direct Purchase Program). Of the total \$22.1 million cited in the audit report as decreases in project GMPs, over \$10 million was related to the Direct Purchase Program. These decreases do not affect the cost of the bond since the CM is still responsible for all the materials purchased through the program even though the GMP has been reduced. Nonetheless, staff will review this finding with the District's Risk Management and Board Attorney's Office to determine if clearer guidelines can be implemented to address such adjustments.
5. Staff disagrees with the audit report's assertion that the District was overcharged \$19,110 in overhead and fees on builders risk insurance premium. This change item was a settlement agreement with the CM for a variety of items related to unforeseen mechanical and electrical systems conditions, utilities conflicts, reimbursement of builders risk insurance and a time extension. The original requested amount was \$565,483 and 191 days of time extension. After careful review and negotiation all parties agreed to \$178,483 and 125 days of time extension. This negotiated settlement provided a net saving of \$387,000 to the district and eliminated the potential for any further claims or litigation by the CM.

RECOMMENDATION 2.1: OSF has developed and implemented very specific procedures for the review and approval of change orders and contingency adjustments (see Exhibits #2 and #3). OSF intends to further

evaluate these procedures (in consultation with the District's Risk Management and Board Attorney's Office) to ensure that they provide the most effective guidelines to determine if the additional amounts paid are the best price and adequately supported by sufficient documentation. Moreover, OSF will schedule and conduct training seminars with staff to review these policies and procedures and to ensure that they are being implemented and followed correctly.

RECOMMENDATION 2.2: The current practice and process by OSF staff already includes a reduction in the cost of bond, whenever appropriate, as part of a negotiated decrease in the project GMP, as stated above there are instances in which a decrease does not reduce the bond cost, such as the Direct Purchase Program. Nonetheless, OSF intends to review this process with the District's Risk Management and Board Attorney's Office to determine if other viable options can be implemented regarding this finding.

RECOMMENDATION 2.3: For the many reasons stated above, OSF strongly disagrees with the audit report's assertion that the District has overpaid CM firms for the cost of bond and insurance premium, and believes that to pursue such a course of action can only lead to an unjustified expenditure of District resources and funds.

Response to Finding #3
“Use of Project Allowances Are Not Always Adequately Documented, Reconciled or Competitively Priced”

As explained in OSF's response to the previous audit report, the use of allowances is an acceptable and necessary practice in the construction industry. Allowances are meant to address the cost of any scope of work that has not been defined in sufficient detail at the time a project is bid by the CM. The District's project team reviews any proposed allowances submitted by the CM for each project to ensure that the amount agreed to for each item is reasonable and adequate to cover the anticipated cost of each item.

OSF respectfully disagrees with the audit report's assertion that allowances have been utilized to add another layer by which cost overruns could be absorbed. Such a statement has no basis in fact nor is it supported by any evidence and/or documents cited by the auditors in their report. It should be noted that although specific procedures may not have been in place at the time the sampled projects were awarded, staff can affirm that the use of any allowance amount cited in the audit report was indeed carefully reviewed and approved by the project team. Nevertheless, OSF staff has since developed and implemented specific

procedures to clarify and formalize the process of review and approval for the use of allowances (see Exhibit #4).

The audit report cites a total of \$1,080,000 in allowances sampled out of \$4,123,000, which were allegedly not used for their intended purpose. OSF strongly disagrees with this finding and can unequivocally affirm that the funds referenced in the report (\$1,080,000) were indeed used for their intended purpose (i.e., for items of work consistent with and necessary to deliver the scope of work for their respective projects). Moreover, it should be clearly understood that any remaining balance in an individual allowance item can appropriately be applied to cover the cost of another cost of work item within a specific project with the prior review and approval of the project team.

The audit report further states that another \$2,600,000 in allowances was used for their intended purposes, but not properly documented. OSF also disagrees with this assertion and is fully prepared to provide documentation to support the use of these allowances.

The audit report indicates that there is no documentation to support the use or return of \$276,000 of the approved allowances. It should be noted that any unused portions of project allowances are ultimately returned to the District by means of final credit change orders and that at the time of this report, some of the projects referenced had not yet been closed out.

With regards to the “CM Project Reconciliation Binders” referenced in the audit report, it is important to note that they are not a contractual requirement. Staff requested that the CM firms participating in the modular program prepare and submit these binders beginning with the 2005-06 modular prototypes and only for the major projects. An analysis of these binders must take into consideration the following:

- These binders are part of the financial reconciliation process only and do not constitute the entire process.
- Some of the final (100% complete) binders have not yet been received.
- The project team has not fully reviewed the 100% complete binders yet.
- The project team is still working with the CM firms to improve the presentation and thoroughness of the binders.
- The binders are recaps and do not constitute the entire record.
- The allowances cannot be billed, throughout the entirety of the project, without appropriate reviews and approvals.

- The auditors were informed that the binders they were provided had not yet been reviewed by the project team.
- One of the nine (9) projects sampled by the auditors was awarded by means of Design-Build delivery method and therefore would not have an associated “CM Project Reconciliation Binder.”

The audit report asserts that there is no evidence of competitive pricing for 52% of the allowances tested (i.e., \$2,143,960). As previously stated, OSF asserts that the project team thoroughly reviewed the proposed use of any allowance amount to ensure that it was consistent with industry rates and standards prior to the approval of any of the allowances cited in this report and therefore also disagrees with this finding.

OSF would like to point out that, as reflected in its previous response to the State Auditor General’s March 2008 report and the internal audit report of September 2008, there has been a drastic reduction in the overall use of allowances in projects awarded by the Board since 2006-07 to less than 1% per project GMP, (see Exhibit #5). Nonetheless, it is imperative that OSF staff have the flexibility to continue to utilize allowances as deemed necessary and appropriate on a project by project basis.

RECOMMENDATION 3.1: As stated above, OSF has already developed and implemented very specific procedures for the review and approval of project allowances (see Exhibit #4). These procedures incorporate clear guidelines regarding the type of documentation that must be submitted by the CM with respect to the use of allowances in order for staff to validate their use and are being closely adhered to by OSF staff.

EXHIBITS

The School Board of Miami-Dade County, Florida, adheres to a policy of nondiscrimination in employment and educational programs/activities and programs/activities receiving Federal financial assistance from the Department of Education, and strives affirmatively to provide equal opportunity for all as required by:

Title VI of the Civil Rights Act of 1964 - prohibits discrimination on the basis of race, color, religion, or national origin.

Title VII of the Civil Rights Act of 1964, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

Title IX of the Education Amendments of 1972 - prohibits discrimination on the basis of gender.

Age Discrimination in Employment Act of 1967 (ADEA), as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

The Equal Pay Act of 1963, as amended - prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 - prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

The Pregnancy Discrimination Act of 1978 - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

Florida Civil Rights Act of 1992 - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

School Board Rules 6Gx13- 4A-1.01, 6Gx13- 4A-1.32, and 6Gx13- 5D-1.10 - prohibit harassment and/or discrimination against a student or employee on the basis of gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference, pregnancy, or disability.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.

INTERNAL AUDIT REPORT



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