

Columbus City Schools Office of Internal Audit



Office of Capital Improvements – Operation: Fix It Audit Report

Report Date: February 25, 2021

Table of Contents

Title	Page
Executive Summary	3
Background	6
Report Issues and Management Responses	9
Audit Objectives	17
Audit Scope	17
Methodologies	18
Appendix A – Issue 57 Deferred Maintenance Bond Building Improvement Reference Guide	19
Appendix B – Glossary of Key Terms	21

Executive Summary

The Columbus City Schools (District) Office of Internal Audit (OIA) recently completed an audit of Operation: Fix It and the role of the Office of Capital Improvements in carrying out the bond-backed initiative. This general audit evaluated objectives selected by OIA. This general audit consisted of the review and testing of these objectives relevant to the Office of Capital Improvements. OIA added one additional objective after the start of fieldwork to address the risk posed by the current pandemic (COVID-19) on construction projects taking place on District premises.

OIA's audit work focused on gaining an understanding of the District's construction process and the governance and internal controls applicable to this process. Based on the results of our work, we identified six areas where improvements can be made. Implementing the recommendations presented in this report will strengthen the Office of Capital Improvements' internal control environment and increase the efficiency of its processes.

Our audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* established by the Institute of Internal Auditors. Our audit included such procedures as we deemed necessary to provide reasonable assurance regarding the audit objectives. Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. Internal auditing helps an organization accomplish its objectives through a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

OIA reported five issues and six recommendations. OIA rated the risk associated with the six issues as follows:

High	Moderate	Low
3	2	0

During the course of the audit, we made the Office of Capital Improvements' management aware of our issues and recommendations for improvement. Good discussion took place regarding the recommendations. OIA appreciates the cooperation extended to us and the assistance of all staff we interacted with as we performed our audit.

The OIA issues noted during the audit are as follows:

Risk Ratings, defined:

- 1 – High/unacceptable risk requiring immediate corrective action;**
- 2 – Moderate/undesirable risk requiring future corrective action; and**
- 3 – Low/minor risk that management should assess for potential corrective action.**

Issues	Risk Rating		
	1	2	3
Objective 1: To determine whether comprehensive procedures are in place relating to the change order process.			
Issue 1 – Insufficient procedures exist for the change order process.	X		
Objective 2: To determine whether change orders were properly authorized and approved.			
No issues noted.	N/A		
Objective 3: To determine whether changes appear necessary and reasonable; work occurred after the execution date and approval of the change; pricing rates were in accordance with contractual terms; and adequate documentation was included with change orders.			
Issue 2 – The Office of Capital Improvements does not maintain a schedule/log to track, record, and report on change orders related to Operation: Fix It contracts.		X	
Issue 3 – Work resulting from some Operation: Fix It contract change orders started prior to the approval of change orders.	X		

Issues	Risk Rating		
	1	2	3
Issue 4 – Operation: Fix It change orders were not consistently supported by sufficient documentation.		X	
Issue 5 – Inconsistent rates were used on Change Order Pricing Review Forms.	X		
Objective 4: To determine whether purchasing requirements were followed for Operation: Fix It projects.			
No issues noted.	N/A		
Objective 5: To determine whether a needs assessment was conducted by the appropriate personnel to determine the size of the levy and what remained given the size of the eventual levy.			
No issues noted.	N/A		
Objective 6: To determine whether the project prioritization for Operation: Fix It was in accordance with Board of Education guidance.			
No issues noted.	N/A		
Objective 7: To determine whether the Office of Capital Improvements had established business objectives, conducted a risk assessment, and established performance metrics for Operation: Fix It.			
No issues noted.	N/A		
Objective 8: To determine whether the Office of Capital Improvements had established procedures			

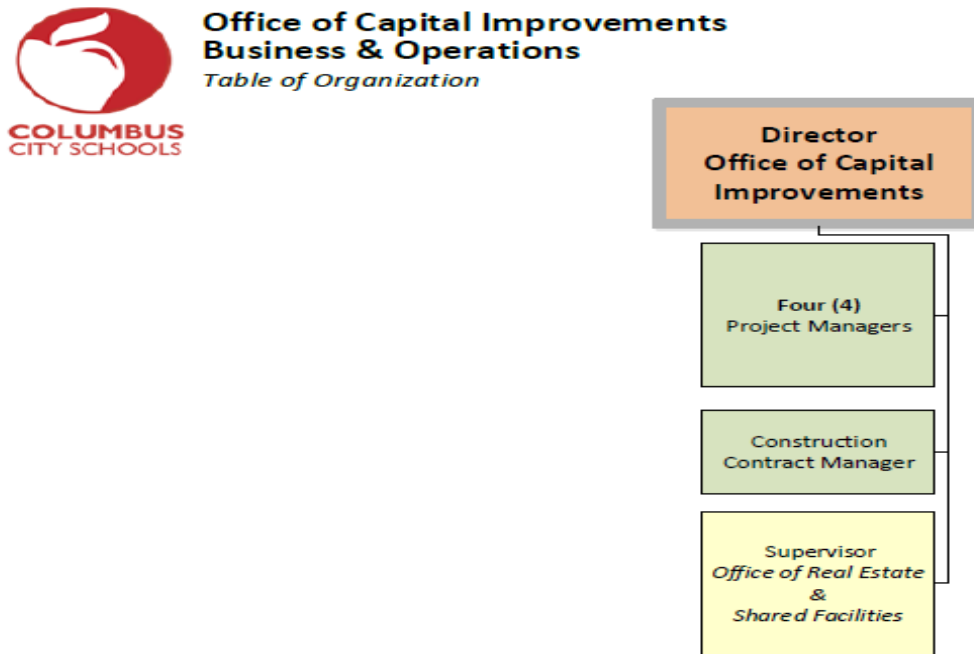
Issues	Risk Rating		
	1	2	3
to address the risk posed by COVID-19 on Operation: Fix It construction work on District premises.			
No issues noted.	N/A		
Objective 9: To determine whether the Office of Capital Improvements funds were used strategically, appropriately, effectively, and in accordance with statutory, levy language, Environmental, Health, Safety, OSHA, and Board of Education guidance.			
No issues noted.	N/A		

Background

The Office of Capital Improvements is overseen by a director who reports directly to the Senior Executive Director of the Department of Business and Operations. This Senior Executive Director reports to the Chief Operating Officer. The Chief Operating Officer is a direct report of the Superintendent/CEO who reports directly to the Board of Education (BOE).

The Director of the Office of Capital Improvements oversees the Office, and its mission is carried out by the Construction Contract Manager, the Office of Real Estate and Shared Facilities Supervisor, and four Project Managers. This organizational structure is depicted in Exhibit 1.

Exhibit 1 – Office of Capital Improvements Organization Chart



The mission of the Office of Capital Improvements is to plan, design, and execute on the District's Facilities Master Plan, including the reconstruction or renovation of academic facilities, and the District's Capital Renewal and Deferred Maintenance Initiatives. The vision for the Office is to build and maintain facilities that meet each student's academic needs.

To accomplish the mission and vision, the Office of Capital Improvements focuses on the following:

- Enhancing academic achievement through targeted improvements that remove barriers to teaching and learning and foster an environment of student-centered learning;
- Providing responsive service to customers and demonstrating the ability to listen, engage, and support customers' needs; and
- Demonstrating excellent stewardship of the public's investment in District facilities.

The Neighborhood School Development Partnership (NSDP) is a volunteer, independent panel created by the BOE. The NSDP is charged with overseeing all of the District's construction projects within the Facilities Master Plan and making recommendations to the BOE prior to a vote to appropriate funds.

Operation: Fix It

In 2016, Columbus voters approved Issue 57, a property tax increase designed to fund District improvements. The 6.92-mills levy increased taxes by 18%; the District used part of that money for a \$125 million to fund Operation: Fix It. This five-year initiative was designed to target deferred maintenance projects and staffing needs across the District.

Operation: Fix It deferred maintenance projects have been carried out in all of the District's legacy buildings. Repairs have varied by building, including new roofs, heating and ventilation overhauls, safety and security systems, fire alarms, plumbing, asphalt and concrete improvements, lighting upgrades, and electrical system upgrades. The Building Improvement Reference Guide in Appendix A provides detail regarding which schools have received which types of improvements. The District reported approximately \$74.9 million in expenditures for Operation: Fix It since 2017, as shown in Exhibit 2. Exhibit 3 details expenditures by project type, and Exhibit 4 status of Operation: Fix It (Projects) as of June 2020.

Exhibit 2 – Operation: Fix It Actual Expenditures by Fiscal Year

Fiscal Year	Amount
2017	\$1,036,317
2018	\$11,309,003
2019	\$36,457,035
2020	\$26,048,644
TOTALS	\$74,850,999

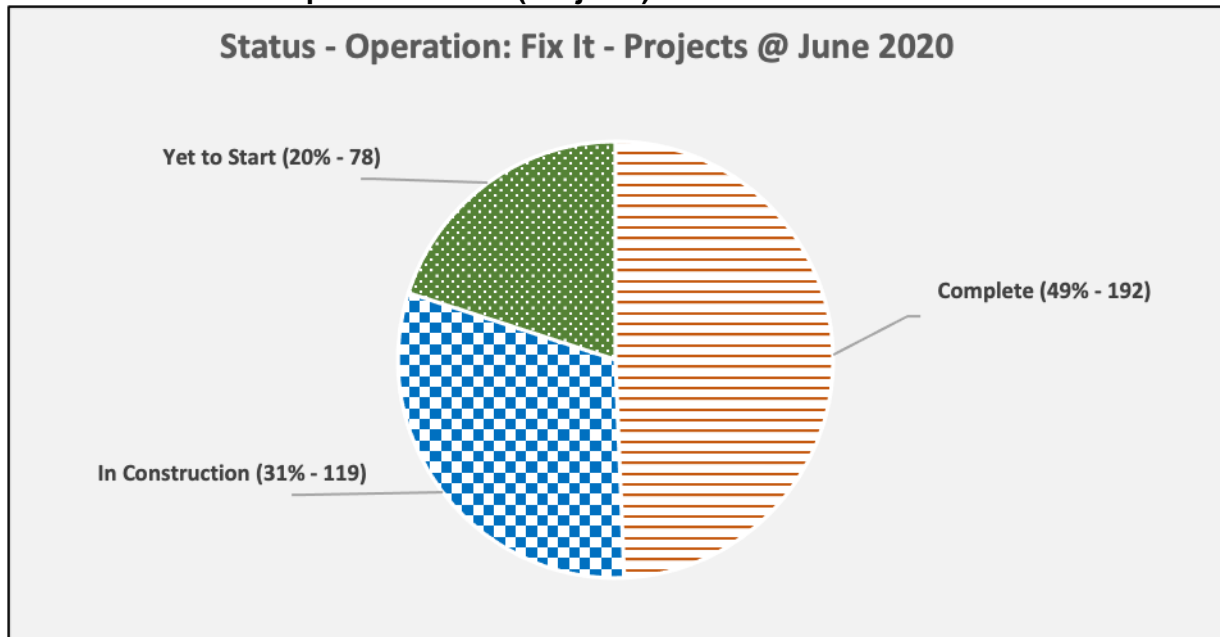
Source: MUNIS - Invoice List by GL Account.

Exhibit 3 – Deferred Maintenance Expenditures by Project Type

Project Type	Amount
HVAC	\$45,538,616
Roofing Repairs	\$16,039,920
Fire Alarms	\$5,528,657
Electrical Upgrades	\$4,118,953
Safety & Security	\$1,088,434
Asphalt & Concrete	\$1,061,770
Plumbing Upgrades	\$930,178
Lighting Upgrades	\$491,034
Capital Improvements – Advertising and Printing & Binding	\$53,437
TOTALS	\$74,850,999

Source: MUNIS – YTD Budget Report.

Exhibit 4 – Status – Operation: Fix It (Projects) – June 2020



Source: Office of Capital Improvements.

Results of the Office of Capital Improvements – Operation: Fix It Audit – Issues and Recommendations:

Issue 1 – Insufficient procedures exist for the change order process. (Risk Rating: High)

As part of determining the overall appropriateness of Operation: Fix It spending, OIA looked at change orders executed on Operation: Fix It contracts. Since most change orders increase the overall contract price, it is imperative that these contract amendments are made through an established change order process. Based on best practice guidance, a change order process should include procedures that address various areas.

Our review of the Office's procedures relevant to the change order process noted incomplete and missing procedures. Specifically, of the 12 procedural areas reviewed for, only 2 had sufficient documentation. One area was partially documented, and 9 areas were either not addressed at all or included limited documentation. Exhibit 5 identifies which procedures were incomplete and/or missing.

Exhibit 5 – Assessment of Change Order Procedures

Procedure Description	Limited or No Documentation	Partial Documentation	Sufficient Documentation
Classification of Change Orders			X
Emergency Change Orders		X	

Procedure Description	Limited or No Documentation	Partial Documentation	Sufficient Documentation
Record of Negotiation	X		
Starting Work prior to Finalization of Cost and Schedule Impact	X		
Standardized Forms	X		
Approval of Change Orders			X
Evaluation of Projects with Excessive Change Orders	X		
Independent Estimates	X		
Required Components of Change Orders	X		
Schedule Impact Analysis	X		
Negotiating a Change Order Settlement	X		
Disputed Change Order or Claim	X		

Source: OIA analysis.

Procedures help create a proper governance structure and internal control framework for an organization. Management can use this structure and framework to ensure the organization's objectives are being met. Well-written procedures also help employees clearly understand their roles and responsibilities within predefined limits.

Lack of formally documented procedures may lead to insufficient and inconsistent change order analysis along with improper or unjustified change order approval. Without comprehensive procedures, the appropriate approvals at a particular step in the change order management process and related decision making is left to an individual's interpretation instead of being explicitly prescribed. These control gaps may ultimately lead to overpayment of work resulting from change orders and District acceptance of unreasonable schedule impacts.

Recommendation

1. The Office of Capital Improvements should continue to update and refine its procedures to incorporate critical elements of the change order process.

Management Response: *The recommendation is a sound one and we agree that a more clearly delineated set of procedures for change orders and the requisite documentation would be beneficial. In addition to the documentation provided by the Office of Internal Audit, the Office of Capital Improvements will research for other*

examples of change order procedures and author a document for this purpose and train staff and consultants on expectations for the use of change orders.

Process Owner: Alex Trevino, Director of Capital Improvements

Implementation Date: March 01, 2022

Issue 2 – The Office of Capital Improvements does not maintain a schedule/log to track, record, and report on change orders related to Operation: Fix It contracts. (Risk Rating: Moderate)

To carry out our audit objectives related to change orders, OIA asked the Office of Capital Improvements for a list of all change orders that were approved for Operation: Fix It contracts. However, the Office was unable to generate such a report for the audit period. OIA learned that management does not maintain a current schedule/log of all change orders relating to construction projects for tracking and reporting purposes at the program level.

Consequently, OIA created a change order schedule/log by manually reviewing every Operation: Fix It project construction file and gathering any change orders and supporting documentation. Through this process, OIA identified 121 change orders representing \$1,484,436.69. Collectively, these change orders resulted in an overall contract rate increase of 2.16% during the audit period (7/1/16 – 6/30/20). One contract increased by \$318,045 due to seven change orders, and another contract increased by 30% based on a single change order. Exhibit 6 details the five contracts with the greatest dollar increase, and Exhibit 7 details the five contracts with the greatest contract rate increases.

Exhibit 6 – Top 5 Contract Increases by Dollar Amount

Project #	Contractor / Vendor	# of CO's	Original Contract Amount	Revised Contract Amount	Variance	Rate of Change
10012040	Brewer-Garrett Co.	7	\$11,056,457	\$11,374,502	\$318,045	3%
17053	Dakin Applied Americas, Inc.	4	\$3,334,399	\$3,591,095	\$256,696	8%
1001600	Trane	3	\$6,793,810	\$7,008,972	\$215,162	3%
19005	Brewer-Garret Co.	1	\$7,318,708	\$7,515,075	\$196,367	3%
17040	Fey Roofing & Sheet Metal, LLC	3	\$818,800	\$902,165	\$83,365	10%

Source: OIA analysis.

Exhibit 7 – Top 5 Contract Increases by Rate

Project #	Contractor / Vendor	# of CO's	Original Contract Amount	Revised Contract Amount	Variance	Rate of Change
18003	Fey Roofing & Sheet Metal, LLC	1	\$57,300	\$74,600	\$17,300	30%
18010	McDaniel's Construction	4	\$129,376	\$164,649	\$35,273	27%
17038	BK Contracting, LLC	1	\$186,000	\$222,925	\$36,925	20%
18018	Electronic Service Professionals	2	\$242,409	\$278,368	\$35,959	15%
17011	BK Contracting, LLC	1	\$241,000	\$270,750	\$29,750	12%

Source: OIA analysis.

Without a process in place for tracking, recording, and reporting on change orders at the program level, the Office of Capital Improvements cannot determine the overall cost exposure for the program. Additionally, without compiling and reporting on critical elements of each change order, it is not possible to identify trends or anomalies that may warrant further scrutiny and possible corrective action. These control gaps in the change order management process may lead to insufficient change order evaluation.

Recommendation

- The Office of Capital Improvements' management should develop a process for compiling project level change order data, in order to conduct program level analysis. The resulting change order schedule/log should be included as part of the Office's monthly or quarterly report to the Neighborhood School Development Partnership Committee.

Management Response: *Change orders are currently logged and tracked at the project level in an Excel spreadsheet designed to track overall project budgets. Additional compilation will either require duplication of data entry or implementation of a more sophisticated system to gather the requested data. It is noteworthy that change orders currently represent a very small percentage of total contracting value.*

Operation: Fix It is in its fifth and final year of implementation. There is currently no approved source of funds to continue this type of work. Absent the clarity that continued funding will be provided for additional capital projects, I do not recommend moving forward with this recommendation at this time. The complexity and cost of integrating such a system with current district systems could prove cost prohibitive and would not

result in a satisfactory return on investment without the continuation of additional projects. At the time the district secures additional funding for capital projects, this recommendation should be revisited.

Process Owner: Alex Trevino, Director of Capital Improvements

Implementation Date: N/A - TBD

Internal Audit Response: The necessary information can be captured in an excel spreadsheet, for all programs managed by the Office of Capital Improvements.

Issue 3 – Work resulting from some Operation: Fix It contract change orders started prior to the approval of change orders. (Risk Rating: High)

Ideally, work resulting from change orders does not commence until the change order has been reviewed and approved. However, some change order work results from unforeseen circumstances or emergencies that impact the critical path schedule for a project. These situations require immediate attention to avoid costly delays and, thus, work must start prior to the issuance of a change order.

These circumstances require the use of an emergency or early start change order. Related procedures should be in place to facilitate a rapid response to the situation as well as to specify use, documentation, and approval requirements. Effective procedures will properly authorize and account for change order work that must commence prior to the finalization of a normal-course change order.

Audit work revealed a lack of adequate procedures governing emergency change orders on Operation: Fix It contracts. We also noted work that commenced prior to the execution of a change order. Similarly, some change orders were executed without a clear explanation or justification of why an early start was necessary.

Specifically, the results of our testing indicated the following:

- For 18% (17 of 93) of the Operation: Fix It change orders tested, OIA determined that work occurred before the execution and approval of the change order.
- For 12% (11 of 93) of the Operation: Fix It change orders tested, due to lack of documentation, OIA could not determine whether work occurred before the execution and approval of the change order.

For the change orders where work started early, associated documentation was consistently lacking one or more of the following critical elements, which would allow for early start of the work:

- An indication of whether the early start of work was a result of an emergency or an undefinable project scope;
- Impact to the critical path schedule;
- Approval and authorization to start work early; and

- Preapproved rates and/or unit prices.

Lack of formal, documented procedures may lead to emergency and early start change orders that are insufficiently supported, exceed the not-to-exceed (NTE) contract amount, or result in schedule delays that neither the contractor nor the District agree to, resulting in potential claims at the completion of the project. Without clearly defined procedures to outline the change order process in the event of an emergency, the District finds itself vulnerable to improper approvals, overpayment of change order work, and District acceptance of schedule impacts that may cause significant delays to the critical path schedule. Additionally, there is the risk of incurring additional cost for work being executed via an emergency change order that does not actually impact the critical path schedule while still having to pay for overtime, expedited materials, and equipment.

Recommendation

3. The Office of Capital Improvements should enhance and refine its procedures to include all critical elements for work starting prior to change order execution and approval.

Management Response: *This recommendation will be addressed in the change order procedures outlined in recommendation #1.*

Process Owner: Alex Trevino, Director of Capital Improvements

Implementation Date: March 01, 2022

Issue 4 – Operation: Fix It change orders were not consistently supported by sufficient documentation. (Risk Rating: Moderate)

Leading practices in change order management specify that, in addition to being carried out according to specific procedures, a complete change order package should include documentation of all aspects of the change as well as signature approvals from all involved parties. The scope of work should be clearly identified and include the contractor's plan to execute the work, along with the associated costs and schedule impact.

The Office of Capital Improvements does not have written procedures specifying what should be included with a change order. However, Capital Improvements management explained to auditors that, at minimum, every change order should include the following:

- A completed Change Order Form with type;
- A completed Change Order Pricing Review Form;
- Any proposals submitted by vendors on the work;
- The Adobe Sign (final audit report) history report for the change order; and
- Other supporting documentation.

Based on our review of 121 change orders executed under Operation: Fix It contracts, we identified various levels of gaps and inconsistencies in the supporting documentation, as follows:

- 12% (14 of 121) were missing the Change Order Pricing Review Form;
- 7% (8 of 121) were missing contractor proposals; and
- 9% (11 of 121) were missing other supporting documentation.

Insufficient change order documentation may expose the District to overpriced or unwarranted work to be added to the project scope, in addition to unwarranted schedule impacts. Without standardized document templates and a final checklist of required items and actions, incomplete change order packages may continue to be received and processed.

Recommendation

4. The Office of Capital Improvements should enhance its procedures relating to change order documentation to clearly state all of the information required before a change order can be processed. Examples of the forms should be included.

Management Response: *This recommendation will be addressed in the change order procedures outlined in recommendation #1.*

Process Owner: Alex Trevino, Director of Capital Improvements

Implementation Date: March 01, 2022

Issue 5 – Inconsistent rates were used on Change Order Pricing Review Forms. (Risk Rating: High)

The Office of Capital Improvements utilizes a Change Order Pricing Review Form (COPRF) to allow the Office to identify the need for change orders and manage them as they arise on a project. The COPRF notes items like project location, contractor, description of change order, date, and expense categories. This information, along with additional documentation, supports costs that are listed on the COPRF and helps streamline the evaluation process. The COPRF also indicates that overhead charged by the contractor should not exceed 10%, any profit realized by the contractor requires an addendum to the original contract, and subcontractor markup should not exceed 10%.

During our review of 121 change orders executed under Operation: Fix It contracts, we noted one vendor's rates on the Change Order Pricing Review Forms (COPRFs) were excessive compared to the rates on other vendors' COPRFs. These rates were also non-compliant with the contractual agreement entered into with the vendor. Specifically, the Design-Builder contract between the District and the vendor established that the percentages for overhead and profit should not exceed 10% of the actual net cost of the additional work, and any subcontractors' markup for overhead and profit combined should not exceed 10%. However, we identified 22 instances on COPRFs associated

with 10 change orders where the overhead and profit rates exceeded 10%. For all other COPRFs reviewed for Operation: Fix It, vendors did not exceed 10% in overhead charges, 5% or 10% profit, and 10% subcontractor markup.

OIA was unable to obtain evidence clearly referencing any documented justification for rates exceeding 10% for the vendor in question. Exhibit 8 details the rates that were charged in excess of 10%. Collectively, these 22 instances of exceeding 10% for overhead, profit, and subcontractor markup cost the District more than \$38,000. In addition, all of the change orders were authorized and approved by all the appropriate people.

Exhibit 8 – Rates in Excess of 10% for One Identified Vendor

Category on COPRF	# of Instances	Amount on COPRF	Rate on COPRF	Recalc'd Amount	Per Contract Rate	Recalc'd Amount	Difference
Subcontractor Markup	1	\$105,644	11%	\$11,621	10%	\$10,564	\$1,057
Subcontractor Markup	1	\$171,500	14.50%	\$24,868	10%	\$17,150	\$7,718
Subcontractor Markup	1	\$19,317	17%	\$3,284	10%	\$1,932	\$1,352
Profit	2	\$10,138	18.50%	\$1,876	10%	\$1,014	\$862
Subcontractor Markup	15	\$209,949	18.50%	\$38,841	10%	\$20,995	\$17,846
Overhead & Profit	1	\$31,464	38.50%	\$12,114	10%	\$3,146	\$8,967
Overhead & Profit	1	\$1,188	40%	\$475	10%	\$119	\$356
TOTALS	22						\$38,157

Source: OIA analysis.

The lack of clearly referenced pricing sources and assumptions for change orders may result in an inability for the District to obtain a fair price for change order work. This may lead to higher project cost, fraudulent activity, and possible budget overruns.

Recommendations

5. The Office of Capital Improvements should enhance and refine its change order procedures to include clearly referenced pricing rates/sources and assumptions for change orders. Additionally, Capital Improvements staff should ensure that subcontractor mark-up, overhead, and profit are compliant with all contract provisions.
6. The Office of Capital Improvements should work with District legal counsel to determine whether the amounts that exceeded contract maximums can be recovered from the vendor.

Management Response: *The Office of Internal Audit brought this concern to our attention in approximately August of 2020. At that time, upon further review, we determined that our existing change order form did not adequately reflect the pricing structure required of our design-build vendor's change orders. Since that time, we have worked with outside legal counsel to develop a new form and have already implemented this form for all new change orders on design-build contracts.*

We are currently working with our vendors to evaluate change orders completed on the old form to determine the financial impacts as a result of the new revised change order form for design-build contracts.

Process Owner: Alex Trevino, Director of Capital Improvements

Implementation Date: New change order form is already in use, June 01, 2021 for reconciling past change orders, March 01, 2022 for full implementation of change order procedures.

Audit Objectives

The objectives of the audit were to determine whether:

- Comprehensive procedures are in place relating to the change order process;
- Change orders were properly authorized and approved;
- Changes appeared necessary and reasonable; work occurred after the execution and approval of change orders; pricing rates were in accordance with contractual terms; and adequate documentation was included with change orders;
- Purchasing requirements were followed for Operation: Fix It projects;
- A needs assessment was conducted by the appropriate personnel to determine the size of the levy and what remained given the size of the eventual levy;
- The project prioritization for Operation: Fix It was in accordance with BOE guidance;
- The Office of Capital Improvements had established business objectives, conducted a risk assessment, and established performance metrics for Operation: Fix It;
- The Office of Capital Improvements had established procedures to address the risk posed by COVID-19 on Operation: Fix It construction work on District premises; and
- The Office of Capital Improvements funds were used strategically, appropriately, effectively, and in accordance with statutory and levy language and guidance from various environmental, health, safety regulations, OSHA, and BOE.

Audit Scope

OIA established the scope of the audit to include a review of basic operational aspects of the processes and evaluation of internal control environments as they relate to the noted objectives. The period of time for the audit included all Operation: Fix It activity relating

to the Office of Capital Improvement processes from July 1, 2016, through December 31, 2019. Our audit scope was expanded to include Operation: Fix It change orders through June 30, 2020.

Methodologies

To accomplish the audit objectives, OIA performed the following tasks as they related to those objectives:

- Reviewed authoritative literature governing work reviewed;
- Obtained and reviewed relevant District BOE policies and administrative guidelines;
- Obtained and reviewed relevant District procedures;
- Reviewed prior relevant audits;
- Interviewed CCS personnel that handle capital improvement activities;
- Observed and documented key processes;
- Reviewed various files and other relevant information;
- Performed limited data analysis of the Operation: Fix It expenditures and change orders; and
- Researched and reviewed best practices used by other entities performing similar functions.

Appendix A



**COLUMBUS
CITY SCHOOLS**

**ISSUE 57 DEFERRED MAINTENANCE BOND
BUILDING IMPROVEMENT REFERENCE GUIDE**

LEGEND							
Roofing Repairs	HVAC Overhaul	Safety/Security	Fire Alarm Replace	Plumbing Upgrades	Asphalt & Concrete	Lighting Upgrades	Electrical Systems
SPIRIT OF SUCCESS							

SCHOOLS				PROJECTS			
ELEMENTARY SCHOOLS							
Alpine							
Avalon							
Gifted Academy (Beck)							
Broadleigh							
Cassady							
Colerain							
Como							
Cranbrook							
Devonshire							
Duxberry Park							
Eakin							
Easthaven							
Fairwood							
Forest Park							
Gables							
Hamilton STEM							
Highland							
Hubbard							
Indian Springs							
Innis							
Lindbergh							
Maize							
Moler							
North Linden							
Northgate Intermediate							
Northtowne							
Parkmoor							
Scottwood							
Salem							
Siebert							
Valley Forge							
Valleyview							
West Broad							
Westgate							
Windsor STEM							
Winterset							
Woodcrest							

Columbus City Schools
Office of Internal Audit

MIDDLE SCHOOLS							
Buckeye							
CCPS for Boys							
CCPS for Girls							
Dominion							
Hilltonia							
Johnson Park							
Medina							
Mifflin Middle							
Ridgeview							
Sherwood							
Westmoor							
Woodward Park							
Yorktown							
HIGH SCHOOLS							
Beechcroft							
Briggs							
Global Academy (Brookhaven)							
Centennial							
Columbus Alternative (CAHS)							
Columbus N. International							
Eastmoor							
Independence							
Marion-Franklin							
Mifflin High							
Northland							
South							
Walnut Ridge							
West							
Whetstone							

LEGEND



Roofing
Repairs



HVAC
Overhaul



Safety/Security



Fire Alarm
Replace



Plumbing
Upgrades



Asphalt
& Concrete



Lighting
Upgrades



Electrical
Systems

Roofing Repairs: Maintenance projects might include the resealing, patching, or replacing of partial or full sections of roofs that are leaking or are no longer sealed properly, which can lead to potential damage from the elements.

HVAC Overhaul: Crews will address existing heating, ventilation, and cooling systems which need significant repair or modernization to make the schools more comfortable and energy efficient. This does not include the installation of new service, such as new air conditioning.

Safety/Security: Funding will be dedicated to the replacement of outdated wire glass with new safety glass. Other projects might include the construction of secure vestibule at the school's main entrance, directing visitors into the main office.

Fire Alarm Replacement: While current alarm systems work properly in all building, priority for these projects - which will include the modernization of older fire alarm/building evacuation systems - will be given to multi-story buildings.

Plumbing Upgrades: Crews will replace faulty or outdated plumbing, with an initial emphasis on upgrading at least one set of restrooms (girls and boys) in each building.

Asphalt & Concrete: These maintenance projects will be dedicated to the patching of potholes and cracks in the parking lots and may also include the repair of driveways from the street onto school grounds and/or new sealing and striping of full or partial sections of parking lots.

Lighting Upgrades: The primary focus of these projects will be to modernize and augment outside lighting on buildings and in parking lots (including the replacement of outdated bulbs with LED lighting), which will contribute to enhanced safety and improved energy-efficiency.

Electrical Systems: Upgrades to older electrical systems will allow for improved and more-efficient distribution of power throughout the building.

Learn more about Issue 57 at www.ccsos.us.

SPRIT OF SUCCESS

Appendix B – Glossary of Key Terms

Change Order – A written instrument signed by an owner and contractor stating their agreement upon all of the following: (1) a change in the work; (2) the amount of the adjustment in the contract sum, if any; and (3) the extent of the adjustment in the contract time, if any.

Change Order Schedule/Log – A written, updated summary prepared by the contract manager tracking the status of all of the design-builder's contract change requests (CCRs), construction change directives (CCDs), and change orders. A change order schedule/log also includes similar information for potential change orders.

Emergency Change Order (ECO) – A change order where work must commence immediately. The emergency change order procedure is typically designed to allow a quick response when unforeseen field conditions threaten project progress.

Not-to-Exceed (NTE) – A monetary contract ceiling; an amount that may not be exceeded for a project or element of work within a project. Once the NTE amount has been reached, the contractor must cease billing.

Record of Negotiation (RON) – A document used to negotiate and document the negotiation of pricing and other terms with the contractor pertaining to a quote or contract. It is intended to help strengthen the negotiations.

Schedule Critical Path – A concept used in project planning, management, and time estimation. This concept is utilized in the *Critical Path Method* (CPM), a technique used to calculate the amount of time required to accomplish a project. A project's Critical Path is a sequence of tasks going one-by-one throughout the project schedule, which do not have *slack*, or leeway, allowing delay of these tasks. Durations of the tasks included on a project's Schedule Critical Path, when summed up, determine the minimal possible time needed to complete the project. If only one task residing on the Critical Path gets delayed for any reason, then the entire project's due date automatically gets delayed as well.