

# Audit Report Highlights

Department of PW – Capital Projects May 2021

Total Potential Recoveries<sup>1</sup> **None** Total Cost Savings<sup>2</sup> **\$297,354**

2019 Capital Project Budget<sup>3</sup> = \$43.8 million County Annual Budget<sup>3</sup> = \$1.4 billion

## Why DIA Did This Audit



As part of the 2020 audit plan, DIA selected Capital Projects in order to have a comprehensive audit of Road & Bridge, Facilities, Sewer and Sanitary, and the Airport capital projects. This was due to various PW Departments ranking on the Annual Risk Assessment. After obtaining an appropriate understanding of the processes and risk, Sewer and Sanitary was excluded from the audit. The audit period under review was January 1, 2018 through December 31, 2019. The purpose of this audit was to ensure:

1. Procedures were in place for establishment of projects on Capital Improvement Plan,
2. Controls were in place for the lifespan of the project. From design/planning and contractor selection, execution, monitoring, change orders, reporting, and completion, and
3. County was in compliance with requirements from various funding sources and applicable legal statutes governing capital projects.

## What DIA Found

Considering the number and size of projects that PW must manage on a regular basis the capital project process appears to be well managed. However, DIA did note the following internal control or compliance issues:

- A lack of a policies and procedures manual;
- A lack of noted PW approval for change orders;
- Task order supporting documentation either lacking detail or having pay rates noted that did not agree to the established task order agreement;
- Missing supporting documentation for change orders or escrow withholding;
- Non-compliance with Ohio Revised Code (ORC) for escrow withholding;
- A lack of process documentation for determining if project work will be completed by PW or contractor.

*Recommendations have been rated by priority: High, Moderate or Low. The report contains **11** recommendations:*

- 0 High** – 30 days to complete
- 3 Moderate** – 90 days to complete
- 8 Low** – 180 days to complete

<sup>1</sup> Total amount that could potentially be recovered from overpayments or other revenue sources.  
The amount the County could potentially save annually by implementing recommendations. Cost savings may not be identified.

<sup>3</sup> 2019 Capital Project Budget taken from approved Capital Improvement Plan. This includes both General Fund and Special Revenue projects. Sanitary project and grant fund budgets are not included.

# Audit Report Highlights

Department of PW – Capital Projects

May 2021

## Background

PW creates and updates a five year Capital Improvement Plan (CIP) which identifies projects to be worked on, year the project is to begin, and funding source.

Projects included on the CIP include Road, Bridge, Facilities, Airport, and Sanitary.

PW personnel will either work on the project themselves with existing staff or oversee a contractor that is performing the work.

In addition, PW works with various outside agencies, such as ODOT and the FAA to secure Federal or State reimbursement for a portion of the project.



## What DIA Recommended

DIA provided PW management with recommendations for improving internal controls. We provided these recommendations during fieldwork to lessen potential risks related to internal controls for capital projects. Doing so during the course of the fieldwork rather than at the end allows the department a chance to remedy things immediately and have no surprises when the report is written.

PW is working to address the issues noted in this report. Based on their responses, we believe corrective action will be taken to mitigate the risks identified. Management responses follow each recommendation in the report. We made the following recommendations:

- PW should create a Policies and Procedures Manual for the capital project process.
- Change orders should have cover sheets that clearly denote PW approval.
- Task order supporting documentation should have the percentage of task order completed and details such as hours worked on the task and pay rates.
- Task order invoices should be reconciled back to task order agreements to assure that pay rates agree to established amounts.
- Management should review payment applications to contractors to assure that the proper retainage amount was withheld from each payment. It should be documented that retainage was reviewed and correct.
- There should be documented determination for Facilities projects as to if they are to be completed by PW employees or a contractor.
- All supporting documentation should be maintained for change orders and escrow withholding.

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*Internal Audit would like to express our appreciation for the cooperation and assistance received from PW during this audit. The strides made help improve the County's efficiency and accountability.*

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# Internal Audit Report

**Capital Projects Audit  
Department of Public Works  
January 1, 2018- December 31, 2019**

**Director of Internal Auditing: Monica Houston, CPA,  
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*Release Date 6/30/2021*



**CUYAHOGA COUNTY  
DEPARTMENT OF INTERNAL AUDITING**

**INTERNAL AUDIT REPORT  
Department of Public Works  
Cover Letter**

May 28, 2021

To: Director of Public Works Michael Dever and current management of Public Works:

The Department of Internal Auditing (DIA) has conducted an audit of the organization's processes and procedures relating to Capital Projects for the period of January 1, 2018 through December 31, 2019. Our main objective was to conduct an audit of internal controls over the identification, approval, and recording of capital projects for Road and Bridges, Facilities, and Airport from the planning through close out of the project. After obtaining an appropriate understanding of the processes and risk DIA excluded capital projects for Sewer and Sanitary from the scope of work to be performed. Our work was inclusive of the procedures used for the establishment of the Capital Improvement Plan (CIP). Additionally, we assessed and reviewed capital projects to determine compliance with various funding source requirements and applicable legal statutes.

To accomplish our objectives DIA conducted interviews with management and staff in regards to the procedures used to place items on the CIP and the controls that are present throughout the capital project process. We compared the procedures and controls noted to other best practices for capital projects. In addition, we conducted control and substantive testing, and reviewed contract, grant funding, and Ohio Revised Code (ORC) compliance documentation.

Our audit procedures disclosed internal control weaknesses associated with change order approvals, proper retainage of escrow, missing supporting documentation, and task order reconciliations. Also process improvement opportunities relating to creating policies and procedures were noted. This report provides the details of our findings. We are confident corrective action has been taken or will be taken to mitigate the risks identified in this audit report.

We conducted this audit in accordance with the International Standards for the Professional Practice of Internal Auditing. Those standards require 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.

Because of the inherent limitations of internal controls, errors or irregularities may occur and not be detected. Also, projection of any current evaluation of the internal control structure to future periods is subject to the risk that procedures may become inadequate due to changes in conditions, or that the degree of compliance with the procedures may weaken.

DIA would like to express our appreciation to Department of Public Works (referred to within this report as "PW") staff and management, and interrelated departments that assisted throughout the process for their courtesy and cooperation during this audit especially as such occurred during a time of significant crisis for the County. A draft report was provided to PW's management for review. Management responses are included within the audit report.

Respectfully,

A handwritten signature in blue ink that reads "Monica Houston". The signature is cursive and fluid.

Monica Houston, CPA, CGMA, CFE, CIDA  
Director of Internal Auditing

Cc: Cuyahoga County Council  
William Mason, Chief of Staff  
Greg Huth, Law Director  
Michael C. O'Malley, Cuyahoga County Prosecutor

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## Glossary

**Capital Improvement Plan (CIP)**

In conjunction with ODOT and the Northeast Ohio Areawide Coordinating Agency (NOACA) Public Works manages a five- year CIP used for the planning of future road and bridge improvements and to inform the public of planned projects in their communities. The CIP identifies the type of funding for the project (Federal, County, and Local) and estimated cost. The CIP will also include the work to be done on County Facilities, County Airport, and various Sanitary projects. The CIP is approved by County Council on a biannual basis.

**Ohio Dept. of Transportation (ODOT)**

ODOT supports the state highway system and provides funding to various construction projects within the state. ODOT maintains a four-year Statewide Transportation Improvement Plan (STIP) which identifies which projects will receive federal and state funding.

**Federal Aviation Authority (FAA)**

The FAA sets guidelines for the operation of airports. They also provide funding to various airport related construction projects for maintenance, safety improvements, or upgrades. FAA will typically reimburse 90% of approved Airport projects.

**Task Order**

Task orders are agreed upon deliverables between Public Works and contracted providers for engineering or other services for capital projects.

**FAMIS**

Cuyahoga County's financial accounting system.

**Trades Employee**

A skilled worker employed by Public Works capable of working on capital projects for Cuyahoga County. Trades include electricians, carpenters, pipefitters, sheet metal workers and bricklayers.

**Retainage or Escrow Withholding**

A portion of contractor payments that is kept by the County to assure that the project is completed in a satisfactory manner. The money is released back to the contractor when the project is completed or it is agreed upon between the contractor and the County to be released. It may be released in its entirety or it could be released in portions.

**Change Order**

Performance of work on a project that was not listed as a part of the project during the bidding or noted in the contract at the outset of the project. Increases to contracts after initial approval would require Board of Control or County Council approval depending on the amount.

## Report Details

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### Purpose

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The purpose of this audit was to conduct a comprehensive examination of Cuyahoga County's capital project monitoring process which is mostly managed within the Department of Public Works (PW).

The Audit Committee approved DIA's 2020 audit plan to include an audit of capital projects including the establishment, funding and execution of the projects. Capital projects were identified as an area of high risk on the Annual Risk Assessment due to the high dollar value associated with these projects across the various PW Departments. We conducted our review through inquiry and testing of expenditures and reimbursements during the audit period. DIA evaluated processes for compliance with existing policies, contractual agreements, and applicable legal statutes.

The audit included review and evaluation of procedures, practices and controls as deemed necessary.

### Audit Objectives

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The objectives of this audit were to determine whether:

- Appropriate procedures were in place for the establishment of capital projects on the CIP;
- Appropriate controls existed and were operating effectively for the lifespan of capital projects (planning, execution, monitoring, change orders, reporting, and completion);
- County was in compliance with various funding source requirements and other applicable laws for construction projects;
- Appropriate controls existed and were operating effectively over the selection and payment process for contractors used for design and construction projects.

Control conscious environment

Adequate level of internal control awareness; proper separation of duties; existence of a proper monitoring system; appropriate authorization/approval of expenditures; and adequate safeguarding of financial, physical, and information assets.

### Scope

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To accomplish our objectives, we focused on capital projects for Road and Bridges, Airport, and Facilities that had some phase of the work occurring between January 1, 2018 through December 31, 2019. Interviews with management and staff were



conducted to document the controls in place and determine if they were designed appropriately. Additionally, tests of transactions and controls were performed to determine if controls were operating effectively.

## **Methodology**

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DIA made inquiries to gain a general understanding of PW's processes for placing projects on the CIP. DIA tested the procurement and approval for contractors selected to work on projects. Also, DIA tested that there were controls over the planning, execution, and close out of projects. This included, but not limited to, such controls as:

- Requiring approved drawings, plans, and specifications.
- Documented inspection and/or supervision throughout the project.
- Documented certification from PW, contractor, and any applicable grantor that the project was completed.

DIA reviewed payment application requests from contractors on projects for both the design and construction functions. This was to assure there was adequate supporting documentation to justify the requested payment, that it agreed to bids or contracts, and they were approved by PW personnel. Also, if changes were required from the original plans for the project DIA verified that the changes were approved by PW personnel, County Council or Board of Control, as well as that the contractors provided supporting documentation to justify the expenses. DIA confirmed that PW was in compliance with any grant funding requirements and that the funds were received and properly posted to the County accounting system. DIA also reviewed relevant sections of Ohio Revised Code (ORC) applicable to capital projects to determine whether the County was in compliance.

To analyze and test project controls during the audit period, DIA reviewed CIP's created from 2016-2021, as well as lists of projects supplied by PW. DIA only considered projects that were completed or substantially completed, for inclusion in the test population utilized in testing the controls over the lifecycle of the project.

## **Background**

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For the purposes of this audit DIA focused on the projects that were completed by the PW Departments of Road & Bridge, Facilities, and Airport. DIA did not review any Sanitary projects as they are self-funded from community property taxes. Below is a description of each of the departments, their funding sources for projects, and how the departments plan their capital projects.

## Road & Bridge Department



**Bridge Division-** The bridge division of PW is made up of design and inspection components. The inspection component is tasked with annually inspecting all of the approximately 280 bridges in Cuyahoga County. The bridges are scored on a 1 to 9 scale (9 being the best). The design component will select and prioritize bridges for capital improvement. The planning of bridge work is condition driven. When bridges are scored a 5 in condition rating, they are considered for placement on the schedule for improvement work. Plans for work are usually made 3-4 years in advance, special planning consideration is made for the Counties' larger, and thus more

expensive, bridges. Bridge design work can be completed by PW personnel or may be contracted out to an engineering firm. The actual construction work will be performed by a contractor secured through County procurement procedures. ORC 5543.19 requires that projects with an estimated cost that exceeds \$100,000 be competitively bid for the furnishing of labor, materials, and equipment necessary to complete the work.

Funding for bridge improvements is received from the state gas tax, which gets split evenly among Ohio counties, and the license tax, which is based on number of license renewals in the County. Grant funds may be obtained for larger projects by submitting applications to ODOT or County Engineers Association (CEA).



**Road Division-** County PW is not mandated to do work on County roads, as with bridges. The Road Division consists of design and construction functions. The design function selects roadways for improvement, prepares design reports and detail plans, and reviews and approves plans when prepared by outside contractors. Outside contractors may be contracted on a project basis. The County also enters into contracts with design firms for general design services. PW will then enter into task orders with the

contractors for various projects until the contract funds are exhausted. The construction function does not perform actual construction on roadway projects, due to force account rules which mandate that the work be contracted out. Each project will have a project supervisor, to act as a liaison between the County and contractor, who will document the work that is performed by the contractor on the project, and assure that the work adheres to contract plans and specifications. Also, the project

supervisor will report any changes to project plans needed for safety or other unforeseen conditions to PW Management.

Roadway projects are added to the CIP depending on their funding source:

*Preventative Maintenance:* Minor projects, like crack sealing or minor pavement repair, are awarded by the County to municipalities through an application procedure based on roadway condition. The municipality administering the project is responsible for selecting the contractor and for any costs that exceed the County reimbursable amount. The County reimburses for materials only and not for any labor costs. Preventative Maintenance projects were not tested as part of the audit as the risk is minimal since the County does not administer these projects.

*County Administered:* Usually more mid-size projects in which the County may pay for all or a portion of the project. The municipality in which the project resides will pay a portion of the project and the County will pay the rest. The municipality will make the payment to the County and then the County will make all payments on the project. Projects are selected based on roadway condition and average daily traffic. Funding for these types of roadway projects is received from the gas and license tax receipts. The County is responsible for the planning, selecting the contractor, and overseeing the project until completion.

*Federal Funding-* Application for the federal funding of road projects by Ohio Department of Transportation, ODOT, is made through Northeast Ohio Areawide Coordinating Agency, NOACA. ODOT will solicit cities for projects to put on their Statewide Transportation Improvement Plan, STIP. Once on the STIP it is known that federal funds will be designated for the project. The County will select projects off of the STIP that they wish to sponsor. These projects will get partial funding from ODOT and the remaining portion is split between the County and the municipality. The County portion of funds come from the gas and license tax receipts. The federal funds are all on a reimbursement basis and the County will make all payments to the selected contractor and then submit necessary supporting documentation to ODOT to get the portion paid back.

The following table details the activity for Road & Bridge capital projects during the audit period and the number of projects tested:

	<b>Open (as of 12/31/19)</b>	<b>Completed (as of 12/31/19)</b>	<b>DIA Reviewed/Tested</b>
Federal Aid	10	7	2
County Administered*	7	5	1
<b>Total</b>	<b>17</b>	<b>12</b>	<b>3</b>

Source: PW Construction Database and CIP

\*- County Administered does not include preventative maintenance projects and also may still include financial support from local cities.

The following table details the approximate dollar amount and source of revenue received by the County for Road and Bridge work:

<b>Revenue Source</b>	<b>2018</b>	<b>2019</b>
Motor Vehicle Tax	\$25,659,856	\$29,883,034
Gas Tax	\$2,417,403	\$2,939,200
Federal & State Grants	\$20,759,505	\$28,097,020
Local Governments Reimb.	\$362,267	\$5,852,228
All other sources of revenue	\$10,990,450	\$19,895,720
<b>Total</b>	<b>\$60,189,481</b>	<b>\$86,667,202</b>

Source: FAMIS data

The following table provides the approximate dollar amount that was expended to contractors for Road and Bridge work:

	2018	2019
Construction Contractor Payments	\$38,046,811	\$50,606,576

Source: FAMIS data

### Facilities



Facilities' purpose is to provide safe, clean environments in which the public is served and County employees work by constructing and maintaining building infrastructure. Facilities is composed of Architectural and Facility Maintenance Divisions. The Architecture Division provides architectural design, planning and project management services for the County. It assists in the establishment of the Capital Improvement Plan and conducts project management

activities such as overseeing capital projects by working with outside design consultants and construction contractors. The actual design and construction of capital projects in some cases may be performed by outside providers, if so, Architecture will work with the providers to guide the project. The Facility Maintenance Division includes Custodial Services and Internal Trades workers who complete repair, maintenance, and construction work for capital projects.

Construction work on capital projects may be performed by either an outside construction contractor or by Internal Trades employees. The decision to use a contractor or Internal Trades employee depends on the type of project, its size and current projects being undertaken by Internal Trades. Capital projects are placed on CIP by the Public Works Leadership team having considered input from: Internal Trades employees reporting to management potential infrastructure issues as they work; end users and building operators making known to Facilities that a building

needs improvement; and findings of buildings condition assessments performed by outside design consultants in addition to code or ordinance mandates. Funding for Facilities capital projects, in most cases, comes from the County’s General Fund unless special appropriations, such as grants, are in place. The following table details the activity of Facilities projects for the audit period and the number of projects tested:

	<b>Construction Not Complete (as of 12/31/19)</b>	<b>Construction Complete (as of 12/31/19)</b>	<b>DIA Reviewed/Tested</b>
<b>Trades Employees</b>	29	18	2
<b>Construction Contractors</b>	11	19	2

Source: Facilities Capital Cash Flow Plan

The following table provides the CIP General Fund budget impact for the audit period for Facilities projects.

	<b>2018</b>	<b>2019</b>
<b>Facilities CIP General Fund Budget</b>	\$8,187,500	\$6,700,000

Source: Facilities approved General Fund CIP Budget

### Airport



The County administers and operates an Airport. The Airport is fully functional and offers such services as hangar rentals, fuel services, and tie downs for planes. All revenue that is generated at the Airport must be used for Airport operations. There is a full-time staff of seven that oversees the maintenance, security, and emergency services of the Airport. The Airport is staffed at all times by at least one employee. The Airport primarily serves corporate aviation and general aviation activity. There are approximately 30,000 flight operations at the Airport on a yearly basis.

The County utilizes a consultant to assist with capital improvement plans. During the period of the audit the consultant was CHA Consulting. The County now utilizes another consultant. The consultant works with the County to identify projects in connection with the Airport Master Plan. The Master Plan provides guidance for future Airport development by considering existing and anticipated aviation demand and ensures the reliability and safety of Airport operations. The consultant performs work for the County on a task order basis. Work performed includes making plans for capital improvement projects, evaluating bids from contractors, acting as liaison between contractor and County, and overseeing construction progress of contractors. The consultant also acts as a liaison between the County and FAA. The FAA provides reimbursements for airport capital projects, reimbursement is usually 90% of the cost. There were a total of three capital projects that occurred during the audit period. They included the 3<sup>rd</sup> and 4<sup>th</sup> phase of runway improvements, Engineered Materials Arresting System (EMAS), and phase 2 of runway overlay. DIA reviewed the 3<sup>rd</sup> and 4<sup>th</sup> phase of runway improvements as it was the largest project and occurred the most substantially during the audit period. The following table provides the approximate amounts for construction costs and FAA reimbursements received during audit period:

	2018	2019	Total
<b>Construction Costs</b>	\$12,864,928	\$1,296,226	\$14,161,154
<b>FAA Reimbursements</b>	\$10,180,909	\$4,383,889	\$14,564,798

Source: FAMIS

## Commendable Practices

DIA commends PW for of the work they perform in support of the Capital Improvement Plan for Cuyahoga County. DIA noted that there were good controls throughout the capital project process. The PW staff also seemed very knowledgeable about the work being performed by the contractors and the respective grant requirements.



We commend and thank PW for their cooperation during the audit especially as such occurred during the challenging crisis created by COVID-19. Based on the results of our audit, we believe PW's capital projects are well-managed, considering the size and variety of projects.

**Priority Level Criteria for Recommendations**

<b>High (P1)</b>	<b>Highest-Ranking Officer’s immediate attention</b> is required. Corrective action is strongly recommended ( <u>30 days</u> ).
	<ul style="list-style-type: none"> <li>• Financially material loss or potential loss</li> <li>• Lack of or failure of internal controls requiring considerable time and resources to correct</li> <li>• Non-compliance with laws, regulations, and policies resulting in significant loss of funds, fines, or restrictions</li> <li>• Significantly negative effect on the County’s reputation or public perception</li> </ul>
	<b>Senior Management’s attention</b> is required. Corrective action is recommended ( <u>90 days</u> ).
	<ul style="list-style-type: none"> <li>• Financial loss or potential loss</li> <li>• Internal controls exist but they are not effective, or they are not consistently applied</li> <li>• Non-compliance with laws, regulations, and policies resulting in loss of funds, fines, or restrictions</li> <li>• Negative effect on the County’s reputation or public perception</li> </ul>
<b>Low (P3)</b>	<b>Management’s attention</b> is required. Corrective action is recommended ( <u>180 days</u> ).
	<ul style="list-style-type: none"> <li>• Financial loss or potential loss is minimal</li> <li>• Internal controls exist, but could be improved</li> <li>• Non-compliance with laws, regulations, and policies is a minimal risk</li> <li>• No effect on the County’s reputation or public perception</li> </ul>

In an effort to assist the auditee in making the best use of their resources, we have prioritized the recommendations according to the table above.



## Findings and Recommendations

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### General Capital Projects Findings

#### **FINDING Lack of Policies and Procedures Manual**

There were no noted policy and procedure manuals for the Capital Project process utilized throughout Public Works. Best practices for Capital Projects Monitoring and Reporting as established by the Government Finance Officers Association (GFOA) states *“The financial management of major capital projects requires a substantial commitment of organizational time and resources. Given their scale and cost, these capital projects can represent a significant undertaking for local governments. Consequently, governmental entities should establish policies and procedures to support effective capital project monitoring and reporting to assist in the management of these significant projects. Such efforts can improve financial accountability, enhance operational effectiveness and promote citizens’ confidence in their government.”*

The PW staff has experience and a good understanding of processes necessary to plan and complete capital projects. The capital project process includes multiple divisions within Public Works and projects can be diverse in nature with varying funding sources. It is also not required by law or County policy to create a policy and procedure manual.

#### **Risk to the County if Not Corrected**

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Lack of approved policies and procedures, could result in inconsistencies between projects depending on the staff involved. This increases the risk of projects not being completed in a manner that is expected by senior management or other stakeholders, as well as inconsistency and inaccuracy in the recording and reporting of project costs.

#### **Recommendations**

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1. **(P3)** Policy and Procedure Manuals should be created for the capital project process. This should be done for each of the departments that are involved with the capital project process. It should cover the process from placing an item on the Capital Improvement Plan to project close-out. The policy and procedure manual should then be approved by PW Director. It should also be reviewed and updated on a regular basis. The manual should include at the minimum:

- Documents needed;
- Timeframe of Steps;
- Approval and review routes;
- Project document storage locations and timeframe for maintaining these documents;
- Systems utilized

***Management's Response:***

***Public Works will develop a policy and procedure manual that encompasses the items recommended by the audit.***

***Target Date for Completion:***

***Public Works will produce the draft policy and procedure manual by 10/1/2021, based on a projected starting date of the draft of 6/1/2021, and a final document within 2 months after the draft (12/1/2021).***

### **FINDING    Lack of PW Change Order Approval**

It is not uncommon for capital projects to require changes to the original contract or to specific account items. Capital Project changes that increase the contract amount requires Board of Control or County Council approval. Changes to specific accounts that do not alter the contract do not require approval from outside the PW Dept. However, documented authorization of services and products not within the original scope of the contract ensures that changes are necessary and costs are acceptable.

On 11 of 26 (42%) change order items reviewed Road and Bridge did not include a Dept. of PW Change Order cover sheet indicating department approval.

It is not required for change orders or force accounts to have a Dept. of PW cover sheet. The department project engineer is aware of changes made through project diary entries however there is no formal approval on these entries.

### **Risk to the County if Not Corrected**

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Lack of formal authorization could result in changes that are not necessary and costs that are inappropriate. Additionally, such increases the risk of contract costs overruns.

### **Recommendations**

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1. (P3) There should be a PW Change Order cover sheet and approval should be clearly noted for each item of change order or force account.

#### ***Management's Response:***

***Public Works will include a change order cover sheet in all change orders presented. The Construction Section Engineer has already verbally communicated this requirement to all Area Engineers. This requirement will also be formally issued in writing.***

***Target Date for Completion: 6/14/2021***

## **FINDING Designer Invoice Documentation Lacking Support**

The County may contract with consultants for general engineering services relating to the design and planning of Road and Bridge Projects. The County may contract directly with an engineering provider on a specific project or general engineering services that are not project specific. General engineering service contracts require task orders to document the project work to be completed, required deliverables, and the amount the County will pay for the subject project. The County will alert the consultant when to begin working on a task element by issuing a Notice to Proceed document. The contracts stipulate what type of documentation the engineering provider is to submit to the County for payment.

- Seven of the 48 (15%) invoice payments relating to engineer services totaling \$80,494 did not include contractually stipulated indication of the percentage of tasks completed in each invoice. Invoice supporting documentation only indicated the percentage completed with the entire task order and not the individual items within the task order.
- Forty-Four of the 48 (92%) invoice payments relating to engineer services totaling \$702,224 did not have detailed supporting documentation from the primary consultant confirming hours worked on projects. Support was limited to the percentage complete for items and/or a list of the work completed.

Public Works is primarily focused on the deliverable work required to complete the project and the total contracted/task order amount to be paid. Additionally, the various engineering contracts do not consistently have the same requirements. Some do not explicitly require task orders to include detailed supporting documentation/information for payment.

### **Risk to the County if Not Corrected**

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By not requiring detailed supporting documentation or invoices that indicate the percentage complete with established tasks, the County is at an increased risk of being overcharged for a task order element.

### **Recommendations**

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1. (P2) The County should require engineering consultants to adhere to applicable contract or task order agreements. Invoices submitted should be detailed and include

supporting documentation that indicates the work completed and the percentage completion of major tasks. The supporting documentation should agree to established task order amounts or rates and indicate hours worked and pay rates from consultant.

2. (P2) The Department of Public Works should include a requirement for appropriate supporting documentation/information on future service-related contracts.

***Management's Response:***

***Project managers will review all invoices for contract compliance and return invoices without proper documentation.***

***Public Works will work with the Law Department to ensure all new contracts moving forward include additional language to indicate which tasks are contracted on a lump sum basis (requiring percentage complete for billing) and which are on a time and materials basis (requiring hourly back up for billing).***

***Target Date for Completion:***

***6/14/2021***

**FINDING Task Order Pay Rates Do Not Agree to Invoices**

The County contracts with a consultant for general engineering services for various projects in connection with the Master Plan Update and Airport Layout Plan for the Cuyahoga County Airport. Contract requirements include:

- Article 1 states “The Scope of Services to be performed under this Agreement shall be as outlined and authorized on a task order basis”.
- Article 1 Section 3(B) states “The County and the Consultant will negotiate a fee for the scope of services. As part of the fee negotiation the consultant will provide an itemized cost breakdown for the fee”.
- Article 3 Section 1 states “The County agrees to pay and the Consultant agrees to accept a negotiated fee for each authorized task order as full compensation for services, labor, material, and equipment necessary to do the work specified in the Notice to Proceed for the task order, including overhead, profit and expenses of every kind incurred in connection with the undertaking and performing said work”.
- Article 3 Section 3 states in part “Fee and schedule adjustments for documented scope changes may be appraised and adjusted by mutual agreement”.

Labor was itemized by position and rate for all task orders reviewed and authorized by the County in the issued Notice to Proceed.

DIA noted the following related to invoices received from the consultant for task ordered work associated with the County Airport Runway Phase III and IV:

- Multiple positions included in invoiced labor were not included in the corresponding task order agreements. These positions invoiced and paid accounted for the following costs:

<b>Task Order</b>	<b>\$ Amount paid to unlisted positions</b>
Task Order #5	\$122,863
Task Order #7	\$46,480
Task Order #11	\$67,311
<b>Total</b>	<b>\$236,654</b>

- Ten of the 11 (91%) invoices received for task order #5 had differing pay rates for positions noted in the task order. This totaled to \$4,532 based on task order established pay rates for the \$440,804 agreed upon task order.
- Five of the 7 (71%) invoices received for task order #7 had differing pay rates for positions noted in the task order. This totaled to \$1,836 based on task order established pay rates for the \$142,890 agreed upon task order.
- Seventeen of the 20 (85%) invoices received for task order #11 had differing pay rates for positions noted in the task order. This totaled to \$54,332 based on task order established pay rates for the \$742,741 agreed upon task order.

It should also be noted that none of the task orders exceeded the total amount agreed upon by the County and Consultant.

Public Works only requires that the consultant is providing the deliverable work required and that the total amount paid does not exceed the total established task order or contract amount. They do not reconcile consultant pay rates billed versus agreed upon rates, or require further explanation from consultant if different positions were used for work that were not established in the task order agreement.

### **Risk to the County if Not Corrected**

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By not reconciling the task order invoices back to the task order agreement, the County paid \$60,962 for labor which exceeded rates agreed upon. They did not exceed the total agreed upon task order amount. Also, by not having agreed upon pay rates for positions that were not noted in the original task order the County does not know if they are paying the correct rate to the consultant.

### **Recommendations**

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1. (P3) The PW Department should reconcile invoices to established task order agreements to assure that pay rates agree to the established task order amounts for positions.
2. (P3) When pay rates established in task orders are estimates or averages, language should be added to the task order to reflect the existence of such. The language should also indicate that payment will be based on actual rates determined at the time of invoicing and that the total amount of the task order is not to be exceeded.

***Management's Response:***

***Public Works accepts risk as we believe we are following the proper procedure for these types of contracts. As long as the overall total task amount does not exceed the agreed upon fee, Public Works does not take exception to this approach.***

***The contract with the previous County Airport Consultant has ended. A new consultant is now being utilized. Task orders with this consultant are strictly structured to use a lump sum approach and no longer based on employee rates and hours. The Public Works Sr. Project Manager will continue to assure the total amount of the task order is not exceeded.***

***Target Date for Completion:***

***Not Applicable***

**FINDING    Missing Documentation for Change Orders and Escrow**

Maintaining documentation is a key control in the capital project process. It provides a record of work done and assures amounts paid to contractors and consultants is accurate and appropriate. Appropriate documents to retain should include but are not limited to:

- Justification for the necessity of change orders which amend the scope of work within a project contract.
- Authorization and approval of change orders by appropriate County personnel.
- Receipt of Notice which is the County authorization to release any portion of the retainage escrow to the contractor. A Receipt of Notice is required within Ohio Revised Code (ORC) section 153.63(2).

While the County utilizes a consultant to assist with capital projects at the Airport, it is ultimately the responsibility of the County to assure that Airport projects and operations are correctly managed.



DIA reviewed three amendments which consisted of 16 change order items totaling \$656,872<sup>1</sup>. During the review, it was noted:

- Eleven of the 16 (69%) change order items did not have supporting documentation detailing the justification of the change in project costs. These change order items accounted for \$722,854 of the \$656,872 total of change orders for the project.
- Five of the 16 (31%) change order items did have supporting documentation. These change orders totaled (\$65,982). Note that two of the five were decreasing plan order items lowering the total amount of change orders.
- Sixteen of the 16 (100%) change order items did not include documented approval of PW personnel or CHA consultants.

DIA also reviewed supporting documentation to verify compliance with ORC 153. Escrow was withheld as required and released in two installments. Internal Audit noted the ORC required Receipt of Notice for the first escrow release was not included with supporting documentation. It should also be noted supporting documentation did include a memo from the County authorizing the release of the second portion of escrow and the contractor signed acknowledgement that all funds had been received for the project.

It is not required for PW personnel to visibly sign off on change orders. The County utilizes a consultant to assist with capital project work at the County Airport. The consultant designs the plans used in construction and inspects the project to assure it is properly completed. The County relies on the consultant to assure that change order work is necessary for projects. It is also not technically required to maintain a record of release from the financial institution to the contractor for retainage escrow.

### **Risk to the County if Not Corrected**

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Lack of adequate supporting documentation which provides justification and approval of change order expenses could potentially result in questioned costs within a grant project. It

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<sup>1</sup> Note: This number reflects \$305,193 in plan decreases. So individual change order items could be for a higher amount than this total.

becomes difficult to determine what the additional materials or labor within a change order were used for without adequate support.

By not maintaining all records regarding retainage escrow deposits and releases it makes it more difficult to assure the County is in compliance with all sections of ORC153.63. Maintaining all documentation would demonstrate compliance and also complete project files.

## Recommendations

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1. (P3) PW should require supporting documentation that details the costs associated with payments made to contractors or consultants. All supporting documentation should be maintained by PW for Airport projects that relate to payments, change orders, and escrow withholding and release.
2. (P3) Even if relying on the consultant for the Airport for management of the construction process, the PW Department should still have documented approval for all change order items.

### ***Management's Response:***

***Supporting documentation for each change order was required and approved by the CHA Consultants and Public Works. Since the consultants were managing the construction project, they used an outside software system that captured these approvals. In addition, the justifications were required by FAA in order to received reimbursement.***

***Public Works will ensure that change order cover sheets are completed for all Airport change orders. The cover sheet has an area for description of work, dates work performed, and requires PW signature and approval. This will ensure consistency on all of our construction projects and that documentation is included in the County's files, as well as the consultants. Public Works will continue to rely on consultant to manage construction projects.***

***The Construction Section Engineer has already verbally communicated this requirement to all Area Engineers. This requirement will also be formally issued in writing.***

### ***Target Date for Completion:***

***6/14/2021***

### **FINDING Non-Compliant Escrow Withholding**

ORC 153.12 and ORC 153.13 describe escrow/retainage requirements for public sector capital projects. Some of the requirements included are:

- All funds retained must be placed in escrow upon reaching 50% of project completion.
- No further retainage should be withheld after a project is 50% complete.
- All labor performed after a project is 50% completed shall be paid at the rate of 100%, prior to which, 8% of the payment can be withheld.

The requirement to restrict retainage after 50% completion is also reinforced in the contract between the County and the contractor in section 00 73 00, 9.11.6.3.

DIA reviewed two capital projects involving outside contractors which included (11) G702-Application and Certificate for Payments (“payment application”). During the review, it was noted:

- In 1 of 11 (9%) payment applications, additional retainage was withheld on a subsequent payment application after the project was 50% completed. The correct amount of retainage was placed into escrow, however, an amount of retainage in excess of escrow was withheld from payment until project completion. The excess retainage totaled \$21,353.
- In 1 of 11 (9%) payment applications, the amount of retainage placed into escrow exceeded amounts prescribed by Ohio Revised Code totaling \$4,832.

It is important to note there is no evidence that a contractor has disputed the amounts retained from the payment applications; it is the contractor that prepares the payment application to be ratified by the designer and then the county.

A mathematical error by management and the contractor in the calculation of retainage had occurred allowing additional funds to be withheld despite the contract being greater than 50% completed. Management did not properly review the invoice to ensure that the appropriate amount of retainage was withheld and placed into escrow.

## Risk to the County if Not Corrected

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By retaining additional amounts not permitted by contract or law, the County is in non-compliance with Ohio law and may be in breach of a contract provision with the contractor, opening itself to legal liability. Ohio Revised Code 153.63(D) states that penalties for withholding contractor funds can result in the governmental entity paying the contractor an amount equal to 8% annual interest compounded daily.

Withholding additional amounts may also damage relationships with a contractor or cause complications in re-preparing the payment application and removing the funds from escrow.

## Recommendations

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1. (P2) Public Works management should perform a review of each payment application for proper retainage prior to authorizing payment with the approval stamp. A separate stamp or written indication can be placed on the payment application signaling that retainage is proper. Along with this separate written indication, the properly calculated maximum retainage amount can be placed at the top of each payment application so that the approving employee is reminded of the amount that retainage should not exceed.

### ***Management's Response:***

***The Department of Public Works agrees with the recommendations to resolve the finding. Specifically, the recommendations are well written and include specific actions and techniques the Department concurs with implementing. The reviewer for each pay application will be identified as the Facilities Section Manager (Section Architect).***

### ***Target Date for Completion:***

***6/15/21***

## **FINDING    Lack of Process Documentation**

As best business practice and establishment of an effective system of internal controls, documentation which chronicles critical decisions and milestones of a capital project should be documented as follows:

- Rationale describing the decision that a capital project be executed by internal Trades workers or an outside construction contractor should be formally included and maintained with the other project documentation
- The conclusion of a capital project conducted by Trades employees should be captured and communicated through the use of a standardized form.

The rationale as to whether Facilities will use internal Trades employees or solicit bids to use a construction contractor is not formally documented.

Additionally, approval for project closure is not formally documented. There is no formal document that represents the completion of a capital project conducted by Trades employees. It was noted that such documentation does exist for capital projects that use outside contractors and complete AIA document G704 Certificate of Substantial Completion.

There are no formal industry requirements that documentation be completed to support the rationale of Trades vs outside contractor decisions or to certify the conclusion of a Trades work capital project. Management, knowledgeable about which projects can be completed with Trades employees and/or have come to completion, had not considered that the rationale of this decision should be documented.

### **Risk to the County if Not Corrected**

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Documenting why an outside construction contractor may be needed, a relevant board or council deciding whether to fund a project could have greater information on whether Trades employees could perform the task. With a record of the rationale, a consistent standard and precedent can be produced on when to use an outside contractor.

With no formal and definitive documentation to signify an end to a capital project, risk is increased that a project can be open-ended and set a precedent that such projects can continue for an unreasonable amount of time. Closure allows management to focus on upcoming projects knowing there was finality to projects already completed. It can help Facilities categorize and

quantify completed capital projects for a given period. Such documentation would also eliminate ambiguity of whether a capital project has been completed.

## Recommendations

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1. (P3) Generate standard documents to be kept on file that can:
  - Justify the rationale on whether a project will be completed with Trades employees or require an outside contractor.
  - Signify the end of a capital project conducted by internal Trades employees.

### ***Management's Response:***

***The Department of Public Works agrees with this recommendation to resolve the finding. Specifically, the Department will document the rationale for the decision on the delivery method of the project, or if the delivery method is changed during the course of project planning, within the CIP. In addition, though current practice memorializes closeout functions of Trades projects via email correspondence, an improved documentation, such as a standard memorandum or form, will formally show completion of a capital project performed by the Trades.***

### ***Target Date for Completion:***

***The target date for completion of this action is July 1<sup>st</sup>, 2021, such that the new procedures are in place for capital planning related to the 2022-2023 budget cycle.***

## **FINDING Missing or Late Approvals and Documentation**

As a best business practice and to promote internal controls, throughout the course of executing a capital project, certain management decisions and authorizations should be documented through the use of signature approvals. This would include, but not be limited to:

- Costing sheets should contain foreman signatures as evidence of review of the number of employee hours worked on a project.
- Invoice approval should occur timely (per terms stated on the invoice or 30 days after receipt) with a dated signature.
- Invoices from designers should include supporting documentation for reimbursements.
- Waivers of liens should contain the signature of contractors as required by the contracts.

These approvals demonstrate that items have been reviewed in a timely manner or that approval for the action has taken place.

Missing signature approvals, lack of timely approval of payments, and missing documentation for expenditures and liens in Facilities' capital project process were found in the following instances:

- Lack of foreman approval signature was found on 37 of 81 (46%) Costing Sheet Foreman signature lines reviewed for projects conducted by internal Trades employees.
- An invoice lacked a dated stamp of approval in 1 of 37 (3%) invoices for materials purchases for Trades projects.
- Seven of 65 (11%) invoices relating to designer invoices and materials purchases were not approved for payment within 30 days of the invoice date.
- Documentation for reimbursable expenditures were not maintained in 9 of 28 invoices (32%) from design consultants. These reimbursed expenditures only totaled \$47.63.
- A waiver of lien from a construction contractor was missing a signature in 1 of 11 (9%) AIA Document G702 Application and Certificate of Payments ("payment application"). The waiver had a notary's signature despite it not being executed by the contractor.

Missing or late documentation and approvals can be attributed to the lack of an established and consistent review process. Many invoices are sent to different Public Works locations for a variety of tasks and from a variety of contractors and suppliers as there is not a consistent policy on how Public Works receives these documents. It is possible that in checking every document for all appropriate contents and markings from all locations where invoices are received that there was some oversight.

### **Risk to the County if Not Corrected**

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Lack of documented approval and support can lead to inaccurate and/or inappropriate payments.

Not obtaining a waiver of lien with each payment application may cause the county to incur greater risk of a lien being placed on its property. Maintaining a waiver of lien can discourage disputes between the county and contractor over whether there is a lien on the property.

### **Recommendations**

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1. (P3) Public Works management should create consistent review processes that ensure:

- Invoices are timely approved with a dated indication of approval and contain adequate supporting documentation for reimbursable expenditures
- Waivers of lien are signed
- Costing sheets have the foreman's approval signature on the available signature lines.

This review process should be incorporated into the Policies and Procedure Manual as recommended in a prior finding.

***Management's Response:***

***The Department of Public Works agrees with the recommendations in order to resolve the finding. Specifically, the Department will develop an interim written Standard Operating Procedure (SOP) for proper and timely processing of contractor pay applications on capital projects and train all Senior Project Managers who manage contractor executed capital projects. Further, the Department has benefited from the addition of an Accountant position to support the Trades project costing since 2018. The Department will endeavor to provide an interim SOP for the Trades costing procedures but remain flexible to the submission preferences of Trades Forepersons given the wide range of computer skills among the group. (All interim SOPs to be incorporated into Departmental Policies & Procedures created under General Capital Project Findings Recommendation #1)***

***Target Date for Completion:***

***A written SOP for pay application processing will be in place and in use by July 31<sup>st</sup>, 2021. A written SOP for Trades costing will be in place and in use by July 31<sup>st</sup>, 2021, in time for 3<sup>rd</sup> quarter costing operations.***