



The City of Fort Smith ARKANSAS

Sub-Basin P002 & P003 Capacity Improvement Project Audit

August 2022

2022-U1



Internal Audit Department
Lucretia Perkins, Utility Auditor

EXECUTIVE SUMMARY

INTRODUCTION

City of Fort Smith Internal Audit Department conducted an internal audit of one of the Consent Decree Initiatives, P002 & P003 Sub-Basin Capacity Improvements Project. The internal audit focused on compliance with the City's ordinances, resolutions, key contractual requirements, and the effectiveness of internal controls. The audit was included in the 2022 Audit Plan and was a direct result of our Risk Assessment process conducted in 2021.

BACKGROUND

The City of Fort Smith has a population of approximately 89,000 citizens. The Utility Department's mission is to ensure the sustained delivery of quality water and wastewater services that promote health, safety, and quality of life for all customers. The City has approximately 627 miles of sewer lines, 12,800 manholes, 23 sewer pump stations, and 2 wastewater treatment plants. The City of Fort Smith Utility Department's (FSUD) largest capital expenditures are from new construction, facility upgrades, and infrastructure improvements. A single project can run into the millions of dollars, involving engineering, design, contractors, materials, and construction. The Engineering Team within the Utility Department is responsible for the design, construction, and maintenance of the City's water and wastewater infrastructure and the management of its real property. As part of the Consent Decree that was lodged January 2, 2015, several projects have been designed to address the wet weather overflows that occur throughout the sanitary sewer collection system. One of those projects was the P002 & P003 Sub-Basin Capacity Improvements.

The P002 & P003 Sub-Basin Capacity Improvements Project began in February 2016 with the Design, Construction began in June 2018, and the project was completed in June 2020. The cost of the project was \$11 million; including \$9.5 million for construction. The Project was funded primarily through the 2015 and 2018 Water and Sewer revenue bonds.

AUDIT SCOPE AND OBJECTIVES

The audit scope covered activities and transactions occurring during calendar years 2018- 2020. Sub-Basin P002 & P003 Capacity Improvements, Project 16-03 was selected from the 2021 Risk Assessment and 2022 Audit Plan.

OBJECTIVES, CONCLUSIONS AND SIGNIFICANT ISSUES

We believe that we have obtained sufficient and appropriate evidence to adequately support the conclusions provided below as required by professional auditing standards. Each conclusion is aligned with the related Audit Objective for consistency and reference. For detailed findings, recommendations, management responses, comments and assessment of responses see the "Detailed Findings, Recommendations, Management Responses, and Assessment of Responses" section of this report.

AUDIT OBJECTIVE 1 – Comprehensive policies and procedures for Construction Management have been established and are consistently followed.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that FSUD does not consistently follow the policies and procedures to maintain the contract management database e-Builder and proper review of payment requests.

AUDIT OBJECTIVE 2 – The City is in compliance with all applicable laws and regulations.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that FSUD is in compliance with applicable laws and regulations. No findings noted.

AUDIT OBJECTIVE 3 – The City has an effective system of controls in place that assist in appropriately managing construction-related costs.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that FSUD should improve the operating effectiveness of internal controls to properly manage related costs.

AUDIT OBJECTIVE 4 – Construction project bids were awarded in compliance with applicable rules and regulations.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that the project bids were awarded properly. However, there is no bid log maintained to record date/time bid received to ensure all bids considered were timely. (Repeat finding of prior audit.)

AUDIT OBJECTIVE 5 – Changes from the initial contract award amount and the final contract price were appropriately negotiated and documented.

CONCLUSION

Based on the results of the audit procedures performed, IA noted certain factors that contributed to the final contract price were not properly outlined in contract documents and documented throughout the course of the project.

AUDIT OBJECTIVE 6 – Internal controls over change orders to the contract are appropriate and adequately documented.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that the weather days, additional days requested, field change orders, requests for proposals, and change orders are not appropriate and adequately documented.

AUDIT OBJECTIVE 7 – Information systems are reliable and timely, and accurate information is available to management and the Board.

CONCLUSION

Based on the results of the audit procedures performed, IA noted that e-Builder does not always have the correct documents.

AUDIT OBJECTIVE 8 – Contractors complied with the provisions stated in the contract.

CONCLUSION

Based on the results of the audit procedures performed, IA noted the contractor did not fully comply with the provisions stated in the contract.

DRAFT

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
1 Policies and Procedures to Maintain the FSUD Contract Management Database are not consistently followed .				
<p>a) e-Builder was implemented in 2017 as the new contract management database to monitor contract spend amounts, contract documents, and progress of projects. However, some of the documents for Project 16-03-C1 were not located in e-Builder. For instance, the Notice To Proceed, the Bid Log, the Submittal Log, the Submittal Package are a few documents that were not found in e-Builder. The Notice to Proceed was uploaded after Internal Audit requested the document and stated that it was not found in e-Builder. (See Exhibit 1-A)</p> <p>b) Multiple users upload documents into e-Builder and many of the documents are uploaded more than once; creating duplicate documents. (See Exhibit 1-B)</p>	<ul style="list-style-type: none"> Lack of documentation in e-Builder could delay project follow-up, research, and audits. Additional time and cost may be incurred to obtain data not available in e-Builder. The incorrect document could be provided and decisions made based off the incorrect information. Duplicate documents in e-Builder requires additional time and resources to sort through the duplicates to find what the user is looking for. 	<ul style="list-style-type: none"> Fort Smith Utility Department (FSUD) should have a document review process in place to ensure that all required documentation and supporting documentation are uploaded into e-Builder. Additionally, this process should include a check list including document clean-up to remove duplicate documents, correct documents are in e-Builder, and ensure documents are in the correct folders. 	High	<p>Agreed: A Standard Operating Procedure (SOP) has been written and training has been conducted to ensure proper documentation storage in e-Builder. This includes proper folder storage of documents. Duplicate records may exist, however, it is better to have duplicates than to delete records and lose the original.</p>
<p>Assessment of responses: a) Management indicated that a SOP had been written; however, Management did not indicate if and when the SOP would be approved and published. b) FSUD should exercise the same care and diligence in deleting duplicate documents as they would in uploading original documents.</p>				
2 Policies and Procedures Are Not Followed to Review Payment Requests				
<p>An invoice is the vendor's statement of charges against the City for items/services provided. Invoices are required documentation for payment requests. Internal Audit noted several inconsistencies in the payment approval process. (See Exhibit 2-A)</p> <p>a) Periodic Payment Request Number 1 includes a <u>Products Purchase Order</u> that appears to be for the purchase of Trench Boxes. The <u>Products Purchase Order</u> does not have a Date, a Purchase Order Number, and is not signed by the seller. Therefore, it cannot be determined if and when the trench boxes were actually purchased or delivered. The total amount of the <u>Products Purchase Order</u> is \$133,512.48. (See Exhibit 2-B)</p> <p>b) Periodic Payment Request #1 includes a quote from Bootheel Rentals for trench boxes. The total amount of the quote was \$181,818.89. (See Exhibit 2-C) IA contacted KAJACS to obtain an invoice for the trench boxes, which had a higher amount (\$185,068.89) than the quote. (See Exhibit 2-D)</p>	<ul style="list-style-type: none"> Insufficient review of supporting documentation for payment requests could result in overpayments, improper payments, improper timing of payments, improper purchase of materials, etc. Paying Contractor for items that were required for the construction contract before work began could result in City paying for products not purchased or utilized by the contractor. 	<ul style="list-style-type: none"> FSUD and the engineer employed to review the work should ensure that payments for materials purchased have the required invoice as supporting documentation for the purchase; and that any related labor has been completed before signing off on payment. A Checklist should be used with each payment request to ensure FSUD has all required documents/information before submitting for payment to the contractor. FSUD and the engineer employed to review the work should ensure that payments made are only be made for actual work performed and actual materials purchased and stored to be used at a later date. 	High	<p>Agreed: Under the current e-Builder payment approval process, the payments are reviewed by the City engineer, Deputy Director, Director, and at a minimum of the Financial Specialist and Contract/Bond Specialist. Under the current Munis payment approval process, the payments are approved by the Deputy Director and Director, and may require additional approval by the Finance Director. Any inconsistencies that may have been found for payments for this project were most likely made prior to the current full approval process was put in place.</p> <p>Agreed: Materials are often paid for prior to the beginning of construction. As the materials are used, a record is kept to ensure the City does not pay for materials not used. The difference is addressed in future payment requests and the final payment. A check list to review invoices is being established for the Admin Coordinator in as part of implementing the aforementioned SOP.</p> <p>Agreed that the trench boxes should have been remitted in the trench safety line item of the contract, not the stored material. KAJACS purchased the trench boxes and was part of their bid of the trench safety, and they hold the receipt.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>c) Periodic Payment Request Number 1 includes \$100,000 (25%) as earned towards line item #23 (Excavation and Trench Safety Systems) for the period from July 9, 2018 through July 25, 2019. However, the materials on hand spreadsheet does not show any materials used for Excavation and Trench Safety Systems (trench boxes) for the same time period. Furthermore, the Inspector's logs for the same time period do not indicate delivery or use of any trench systems (trench boxes). (See Exhibits 2-E, 2-F, and 2-G)</p>	<ul style="list-style-type: none"> Contractor may be paid for work not performed during the payment period. 	<ul style="list-style-type: none"> FSUD and the engineer employed to review the work should confirm that work was actually performed during the period for which the payment is requested. 		<p>Agreed: The City did not pay for or purchase the trench boxes. The trench boxes were purchased by KAJACS and was their property. The items should not have been in stored material but listed under trench safety. Trench Safety was a Lump Sum payment item. The trench boxes were delivered and verified as such.</p>
<p>d) KAJACS Contractors was paid 100% of the cost submitted toward the purchase of trench boxes (\$315,415.31) and 25% (\$100,000) of line item # 23 on Periodic Payment Request # 1 before any trench work was actually performed. The total bid amount of line item #23 was \$400,000 and was deducted throughout the contract as work was performed toward that line item and those materials were used. The trench boxes should not have been included in materials and the contractor should have been paid only as work for line item # 23 was performed. (See Exhibits 2-E, 2-F, and 2-G)</p>	<ul style="list-style-type: none"> Paying contractor more than the cost of the line item without verifying work performed and materials received. 	<ul style="list-style-type: none"> FSUD and the engineer employed to review the work should confirm the supporting documentation is accurate and that work was actually performed during the period for which the payment is requested. 		<p>Agreed: The City did not pay for or purchase the trench boxes. The trench boxes were purchased by KAJACS and was their property. The items should not have been in stored material but listed under trench safety. Trench Safety was a Lump Sum payment item. The trench boxes were delivered and verified as such.</p>
<p>e) Periodic Payment Request #1 was reviewed and approved by both the Engineering Consultant and the City Project Engineer; yet, no invoices for the trench boxes were included. The PO was also entered and approved in Munis without invoices for the trench boxes. (See Exhibit 2-H)</p>	<ul style="list-style-type: none"> Without proper review of supporting documentation for payment request the contractor may be paid for materials not received or purchased for the project. 	<ul style="list-style-type: none"> FSUD should not rely solely on the Engineer Consultant payment requests for the Contractor and should ensure payment request are complete and accurate in all material respects before submitting the payment application for payment. FSUD is responsible for ensuring the best interest of the City. Inspector Logs should be compared to payment request to ensure payment for line items are appropriate and reasonable. 		<p>Agreed: The City did not pay for or purchase the trench boxes. The trench boxes were purchased by KAJACS and was their property. The items should not have been in stored material but listed under trench safety. As the City did not buy the trench box, there is no PO for them.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>f) Article 14, paragraphs 14.2 and 14.3 of the General Conditions state "If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location the pay estimate shall be accomplished by such data, satisfactory to ENGINEER, as will establish OWNER'S title to the material and equipment and protect OWNER'S interest therein, including applicable insurance." and "CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any pay estimate, whether incorporated in the Project or not, will pass to OWNER at the time of the payment free and clear of all liens, claims, security interests and encumbrances." Contractor was paid for trench boxes and retained possession of the trench boxes after the project was completed. Under the General Conditions of the Contract the trench boxes would have belonged to the City. (See Exhibit 2-I)</p>	<ul style="list-style-type: none"> Ownership of equipment and materials may not be transferred to the City as required in the General Conditions. 	<ul style="list-style-type: none"> FSUD should ensure all materials and equipment submitted for payment and not incorporated in Work but delivered and stored and not eventually incorporated in the work are returned to the City. 		<p>Agreed: In this case, however, KAJACS owned the boxes and the fees charged were the equivalent of rental fees. KAJACS provided information on the cost of the trench boxes to show they were not cheating the City. The trench boxes should not have been listed in stored materials. As the trench boxes are the property of KAJACS, they did not leave the boxes. This is the same as the exuviation equipment that was used by KAJACS for this project.</p>
<p>g) Periodic Payment Request #15 does not include copies of the invoices from Industrial Precast (totaling \$18,727.47).</p>	<ul style="list-style-type: none"> Without proper review of supporting documentation for payment request the contractor may be paid for materials not received or purchased for the project. 	<ul style="list-style-type: none"> Contracted Engineer should request and attach to payment request materials received log that identifies materials, delivery of materials etc. to support Inspector Logs. Additionally, if there is an issue regarding materials or costs, there is a record of the deliveries. 		<p>Agreed: The payment was correct. The copy of the paid invoices were not attached as the materials listed form stated under invoiced to date. We have obtained the copies from the Engineer Consultant who inadvertently left them off. They are attached in to invoice in e-Builder. This has been addressed and payment was correct. The SOP and Phase I will minimize mistakes.</p>
<p>h) Periodic Payment Request #16 had an invoice attached for \$878 that was not included in the payment request total. Although the invoice submitted was not for the current payment request period; it was not submitted on the next payment request. (See Exhibit 2-J)</p>		<ul style="list-style-type: none"> FSUD should ensure payment request are calculated and totaled correctly. 		<p>Agreed: The payment was calculated and totaled correctly based on documentation. The copy of the paid invoice was inadvertently attached or inadvertently not listed on the materials stored form by the Contractor. Therefore, not included in the payment as materials invoiced. The aforementioned SOP and other planned measures will put safe guards in place to minimize mistakes made by Consultant and Contractor.</p>

Assessment of responses: a) and b) Management's responses, as presented, do not address the issue that there were no invoices submitted with the payment request. c) Management's response, as presented, does not address the issue of paying for 25% of the work before any work had been done. In addition, if payment for materials is made prior to work being done, the City should establish that the materials will be owned by the City at payment. Additionally, this was not a lump sum contract and was paid based upon percentage of completion. d) The response by Management does not address the issue of paying for 25% of the work before any work had been done. In addition, if payment for materials is made prior to work being done, the City should establish that the materials will be owned by the City at payment. e) Management's response, as presented, does not address the issue of approval and review of payment requests. This item was listed under materials and the City did reimburse KAJACS based off of a purchase order and for the amount submitted. f) FSUD's response, as presented, does not address the issue of materials submitted for payment subject to Article 14, of the General Conditions. g) and h) Management's response, as presented, sufficiently address the issues identified and corrective actions are appropriate.

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
3 Request for Proposal and Change Order Procedures and Policies Are Not Followed				
<p>a) Changes to construction Contracts are made by use of Change Orders to the original Contract. Any change to a Contract that meets the following criteria requires a resolution authorized by the Board of Directors prior to being executed by the Mayor:</p> <ul style="list-style-type: none"> * Increases the total contract price to \$35,000 or greater; and * Changes to a contract with an original contract amount of \$35,000 or greater. (See Exhibit 3-A) <p>b) Request For Proposal #1 and Request For Proposal #2 were completed by Contractor and submitted to Engineer Consultant. The Request For Proposal form states "this is not an order to proceed with the proposed change. Notice to Proceed with the proposed change will be issued later in the form of a Change Order or Work Change Directive." (See Exhibit 3-B) Internal Audit requested from FSUD the documentation for the Accepted Request For Proposals to allow the Contractor to proceed and none could be provided. (See Exhibit 3-C) Additionally, the total amount of Request for Proposal # 2 was \$38,179 which meets the criteria outlined in the Project Management Manual for a Change Order.</p>	<ul style="list-style-type: none"> • The City may not be in compliance with the contract and may pay more than the original contracted price. • Procedures established in the Project Management Manual may not be followed and the City may pay more than the original contract price without a change order. 	<ul style="list-style-type: none"> • FSUD should ensure Change Orders are issued when indicated as outlined in the Contract to ensure compliance with the contract and document cost to the project. • FSUD should ensure that procedures established in the Project Management Manual are followed. Additionally, FSUD should document all communications for Request For Proposals to ensure the processes are followed and any exceptions are documented. 		<p>Agreed: All change orders are now approved by the Director and if money or time is changed in the contract, it is taken to the next Board of Directors' Meeting. If the work is needed prior to that meeting to prevent work stoppage, the City Administrator is contacted for conditional approval until the Board Meeting.</p> <p>Agreed: The project management manual is out of date and was originally prepared by CDM-Smith. This manual needs to be updated with current practices.</p>
<p>Assessment of responses: a) Management's response, as presented, does address the issue. b) Management acknowledged that the project management manual is out of date but did not provide a timeframe when the manual would be updated.</p>				
4 Proper Documentation of Field Change Orders and Change Orders not maintained.				
<p>a) The Engineer Consultant and/or Project Engineer may authorize minor changes in the work that does not change the Board approved contract price or contract time by issuing a Field Change Order. The contractor may not perform the changed work until approval has been received from the Engineer Consultant. The Project Management Manual states "Issue raised by Request For Information (RFI) would generally not require the issuance of a field order because the RFI response provides written documentation." (See Exhibit 4-A) However, The Engineer's response to RFI #12 says "The changes to the manhole location and alignment will be documented in Field Change Order Number 1." (See Exhibit 4-B) Yet there was no Field Change Order issued for the manhole relocation.</p>	<ul style="list-style-type: none"> • Contractor may proceed with work without proper approval to changes requested and work may not meet specifications of the contract without the issuance of Field Change Order as noted in the RFI. 	<ul style="list-style-type: none"> • FSUD should ensure that all Field Change Orders are issued when appropriate as outlined in the Project Management Manual and the Contracts to ensure contract specifications are met. 	High	<p>Agreed: The project management manual is out of date and was originally prepared by CDM-Smith. This manual needs to be updated with current practices.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>b) RFI No. 29 is a request add an additional manhole. This request was noted as acceptable by the engineer. The engineer noted that a Request for Proposal (RFP) would be issued and the proposed connection would be incorporated into a future Change Order. (See Exhibit 4-C) There was no RFP or Change order issued for the additional manhole.</p> <p>c) All changes made throughout the Project were combined into one Change Order at the conclusion of construction in a Change Order for approval of the Final Payment. (See Exhibit 4-D)</p>	<ul style="list-style-type: none"> Changes to the design without City approval/knowledge could result in design error, cost overrun, etc. Changes to the scope and time of the contract may not be approved when identified and the amount of the Final Payment may not be correctly calculated and the City may overpay Contractor. 	<ul style="list-style-type: none"> FSUD should ensure Engineer Consultant issues Field Change Orders when a RFI indicates a Field Change Order will be issued. FSUD should ensure Change Orders are issued when appropriate as outlined in the Contract and Project Management Manual. 		<p>Agreed: In this case, a manhole was moved instead of tearing up the street and replacing a line that was not being used or would not be used in the future. This was a cost savings to the City.</p> <p>Agreed: All change orders are now approved by the Director and if money or time is changed in the contract, it is taken to the next Board of Directors' Meeting. If the work is needed prior to that meeting to prevent work stoppage, the City Administrator is contacted for conditional approval until the Board Meeting. The project management manual is out of date and was originally prepared by CDM-Smith. This manual needs to be updated with current practices.</p>
<p>Assessment of FSUD's responses: a) Management's response, as presented, does not address the issue that there was no field change order issued as noted by the Engineer Consultant. b) Management's response, as presented, is incorrect and does not address the issue that no RFP or Change Order was issued at the time. RFI # 29 was for an additional manhole, not located in a street, and did result in an overage on line item # 104 for \$3,500. (See Exhibits 4-E, 4-F and 4-G) c) Management's response, as presented, does not sufficiently address the issue that no change orders were issued during the construction project and all changes were incorporated into one change order after the project was completed. Additionally, Management acknowledged that the project management manual is out of date but did not provide a timeframe when the manual would be updated.</p>				
<p>5 Review and Calculation of Days added to the Contract Time are not verified by FSUD</p>				
<p>a) Weather related delays may be added to the contract time when approved by the Engineer Consultant and/or Owner. (See Exhibit 5-A) FSUD relies on the Engineer Consultant to approve weather days and calculate liquidated damages.</p>	<ul style="list-style-type: none"> Engineer Consultant may not calculate Liquidated Damages correctly based upon unapproved weather days and the City may not be paid Liquidated Damages. 	<ul style="list-style-type: none"> FSUD should not rely solely on Engineer Consultant to calculate Liquidated Damages. FSUD should verify all approved weather days and the perform a separate calculation of Liquidated Damages. 	High	<p>The Utility Department would require additional staff to duplicate the work being paid for by the City of the Engineering Consultant. The City has the final say in calculating and assessing liquidated damages, however, please note the Board of Directors are the one who approve any liquidated damages for a contract.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>b) The total number of days noted in the Change Order do not total correctly when calculating the Substantial Completion Date and Final Completion Date. The Notice to Proceed states Substantial Completion date was 11/30/2019 and Final Completion date was 12/30/2019. (See Exhibit 5-B) Change Order #1 adds 94 days to those Dates (See Exhibit 5-C); which would then extend Substantial Completion Date to 03/03/2020 and Final Completion Date to 04/02/2020. Contractor requested an additional 60 days between Substantial Completion and Final Completion. Engineer Consultant stated "we recommend the request be held and considered after observing the Contractor's progress on clean-up and site restoration". The 60 days was not included in the calculation of the extended time of the contract. Without approval for the additional 60 days between Substantial Completion and Final Completion, Liquidated Damages should have been calculated at \$500 for each calendar day from 04/03/2020 through 06/23/2020. Therefore, Liquidated Damages would have been assessed for 81 days at \$500/day, totaling \$40,500. (See Exhibits 5-D and 5-E)</p>	<ul style="list-style-type: none"> FSUD not correctly documenting and totaling days may not allow Liquidated Damages to be enforced and hold the Contractor accountable for a delay in the project. 	<ul style="list-style-type: none"> FSUD should ensure the calculation of any extension of time to a contract is correct and that Liquidated Damages are enforced. 		<p>Agreed: The Department must do a better job of tracking extensions, etc. Partially Agreed: We do not solely rely on the engineer consultant to calculate/verify weather days. The weather days are verified by the engineer and at times if corrections are necessary, you will see changes on the pay estimate in Munis as a strike through and correction. The City Weather days can only be approved by the Board of Directors, they approve the change orders which extend the contract time. Item to Note: Liquidated Damages are a reasonable approximation of actual damages (cost) incurred by the City as a result of administering the contract beyond the contract time. If the Liquidated Damages can be proven to be well beyond the actual cost they could be judge as Punitive Damages and disallowed by a Judge. Some times it is prudent to reduce the amount of Punitive Damages to avoid legal fees defending the Liquidated Damages amounts. However we should not force the acceptance of additional time to justify this. The City should only extend contract times by the amount of day that are justifiable. May want to seek legal advice before setting hard & fast rule here.</p>
<p>c) The number of weather days on the Weather Day Request Summary report provided by FSUD do not total correctly as listed on the report. The Weather Day Request Summary report shows 64 days; however the total days actually equals 61. (See Exhibit 5-F)</p>	<ul style="list-style-type: none"> Inconsistencies in the reporting of weather days could errors in the calculation of time extensions to the project. 	<ul style="list-style-type: none"> FSUD and Engineer Consultant should maintain a log of approved weather days to ensure proper calculation of project/contract time. 		<p>Agreed: The Department and Engineer Consultants must do a better job of tracking extensions, etc.</p>
<p>d) Testing of weather days as noted in the Daily Inspector's Logs (57 days) (See Exhibit 5-G) do not total to the number of days listed on the Weather Day Request Summary (64 days) or the number of days indicated on the final Weather Days Notification Form (62 days).</p>	<ul style="list-style-type: none"> Inconsistencies in the reporting of weather days could cause errors in the calculation of time extensions to the project. 	<ul style="list-style-type: none"> FSUD/Engineer Consultant should ensure the proper recording of weather days on the Daily Inspector's Logs and the Weather Days Notification forms to maintain consistency between documents for approved weather days. 		<p>Agreed: The Department and Engineer Consultants must do a better job of tracking extensions, etc.</p>
<p>e) The Weather Days Notification Form received from FSUD for Periodic Payment Request # 11 (See Exhibit 5-H) is not the same as the Weather Days Notification Form included with Periodic Payment Request #11 (See Exhibit 5-I). The Weather Days recommended by the Engineer appear to have been altered on the document received from the FSUD. The FSUD document shows 5 recommended weather days while the document with the pay request shows 6 weather days recommended.</p>	<ul style="list-style-type: none"> Contradictions in Weather Days Notification Forms may result in incorrect calculation of total weather days allowed and incorrect calculation of contract extension time, and incorrect calculation of Liquidated Damages. 	<ul style="list-style-type: none"> FSUD should ensure Weather Days Notification forms are consistent with all supporting documentation for payment requests and Approved Weather Days logs, summaries, etc. 		<p>The City Engineer has the right to change the number of weather days if not in agreement with Consulting Engineering Firm/Contractor. Contract documents will require the contractor to submit time extension request with each periodic pay request. Item to note, in e-Builder and Munis the number of days is six. Utility has not reviewed any weather days that stated 5 on RFP #11.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>Assessment of responses: a) Management's response, as presented, does not address the issue of periodically verifying the engineer consultant's work. Management stated that they had the final say in calculating liquidated damages, however Audit identified discrepancies between the different calculations. It would also be prudent of Management to ensure that the calculations were correct before giving the Board incorrect information to approve. Additionally, it has been noted by Audit that the Consulting Engineers have made several errors regarding this contract and due to liquidated damages being a critical component in a contract, taking extra time to double check the calculation would be beneficial to ensure the numbers and amounts are correct. Extra staff would not be needed because all of the support and documentation should be attached and the City is ensuring the calculation is correct. b) Management's response, as presented, contradicts their previous response and does not address the issue of the correct calculation and review of days worked. c) Management's response notes that they must do a better job of tracking extensions, etc. but does not state how and when this will be accomplished. d) Same as c. e) Management's response, as presented, does not sufficiently address discrepancies in the weather days notification forms. Audit does not dispute that Management has the right to change the number of weather days. Audit identified and recommended that supporting documentation agreed and any difference be identified on the forms.</p>				
<p>6 Substantial Completion is Not Adequately Defined in Contract Documents</p>				
<p>a) The contract document is ambiguous to the reader due to the lack of properly identifying when the Contract Time begins and when Substantial Completion occurs. This increases the risk of the City not being able to properly calculate liquidated damages for projects and hold Contractors accountable for project completion. (See Exhibits 6-A and 6-B)</p>	<ul style="list-style-type: none"> Liquidated Damages may not be calculated correctly due to the Substantial Completion and Final Completion Dates not being properly defined in the Contract. 	<ul style="list-style-type: none"> The contract documents should be revised to properly define when Substantial Completion occurs for each project to ensure that all parties to the contract have a common understanding of this date and when liquidated damages start to accrue. 		<p>Agreed: The contracts should provide the required timeline for projects. Please note that for this project Page 1 of the Bid Form 00400 Specifies 510 days for substantial completion plus 30 days following substantial completion. The entire work is 540 consecutive days. See also page 2 of the Pre-Construction notes. The days are specifically lined out. Additionally, during construction 62 weather days were recommended. After substantial completion there was considerable days of wet weather for which the contractor requested an additional 60 days be added to the normal 30 days added for final completion. In the end it was decided to add a total of 94 days in the final reconciliation change order. This was on top of the City being hit by the greatest flood ever recorded, Covid towards the close of the project, delays were incurred by unforeseen field conditions including the large electrical conduit encountered just east of the P St plant, the wire wound reinforced concrete sewer pipe that delayed the 500 foot bore, and the break through of surface water that flooded the bore pit.</p>
<p>Assessment of response: a) Management's response, as presented, agreed with the finding but did not identify how and when the issue would be resolved. Management continued to give reasons for extensions to the contract time but did not include that the project took 715 days, which is 21 days over the 694 days approved by resolution no. R-92-20.</p>				

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
7 Inaccurate Record Keeping of Capital Projects Assets				
<p>a) The costs (\$75,000) for Section 601 Water Line Improvements and Request For Proposal #2 (\$38,179) were included in the contract total for Project 16-03-C1 and were allocated to Sewer Systems and not Water Systems. Therefore, the Sewer System Asset # 20004 was overstated by \$114,182 and no entry was made for Water System Improvements. (See Exhibits 7-A and 7-B)</p>	<ul style="list-style-type: none"> Cost not be properly allocated between Water System and Sewer System Improvements may not be correctly allocated in the General Ledger and/or Fixed Assets. 	<ul style="list-style-type: none"> FSUD should ensure that all Capital Cost within a project are properly allocated to the correct Water Systems or Sewer Systems Improvements. 		<p>Work discovered/performed during the course of a project that would be repair or replacement in nature could be considered part of the installation of the project as a whole and as such be included as part of the sewer project and capitalized as such. Realistic argument could be made the expense is categorized exactly as it should have been. The water line in question had to be moved in order to move forward with the rest of the project. In speaking with the Finance Director, his thought process was as above. The water line is still being depreciated in the same manner as it would if categorized as water. Both the financials and the fixed assets are materially correct. As a point of clarification, the Finance Department is currently responsible for fixed assets.</p>
<p>Assessment of responses: a) Management's response, as presented, does not specifically address the issue that the water line improvements were presented in the contract as separate line items and could have been coded to water instead of wastewater.</p>				
<p>Observations</p>				
<ol style="list-style-type: none"> Pre-construction meeting minutes requested that a 24-hour 48-hour notice be given for work days requested outside of the normal work days. Request For Information # 6 was not made within 48 hours of the requested dates. (See Exhibits O-1 and O-12) The Weather Day Request Summary document properties has a created date of 05/18/2022. It appears that the document was not prepared until Internal Audit requested the weather day notifications. (See Exhibit O-2) FSUD relies on the Engineer Consultant to verify materials used, days worked, and weather days approved. The Daily Inspections Logs note that FSUD inspectors visited the site during the project, However, they did not perform or document work at the times they were on site. 		<ul style="list-style-type: none"> FSUD should ensure In-House inspectors are periodically on site randomly selecting and verifying materials received, materials used, work performed, weather conditions, etc. to ensure that Engineer Consultant is performing in the City's best interest. 		<p>Please note, 48 hour request is greater than 24 hours. Not sure the point of this observation.</p> <p>The summary was created for Internal Audit from the weather day notifications.</p> <p>This would require additional staffing and be inefficient. Engineer Consultants work for the City, and their work is reviewed by City engineers. If we enter an Agreement with an Engineering Consultant they are responsible for verifying and reporting. Our inspectors are not at the level of a certified Engineer on large projects. By utilizing an Engineering Consultant, liability and cost of a remediation of the issue are responsibility of the Engineering Consultant.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>4) The Transmittal Letter for the Trench Safety Systems includes specifications for Efficiency Production trench boxes. The transmittal letter is acknowledging receipt of the submittal and not approval for those particular trench boxes.</p> <p>5) Project 16-03-C1 was bid in November of 2016 and then re-bid in February 2017. The scope of the project was changed to include cost savings; however, the Engineer Consultant's re-bid Estimate was \$1.8 million more than the initial bid estimate. (See Exhibit O-3) The Engineer Consultant changed the unit cost on 102 of 137 line items. 69 of those line item's unit cost were changed to the unit cost of the low bidder on the first bid. (See Exhibit O-5)</p> <p>6) The project was rebid because it was too costly; therefore, the scope was revised to implement cost savings. The low bidder's re-bid was \$4.8 million (33%) less than their first bid while the other two bidders were 22% and 25% lower than their first bid. (See Exhibit O-3) The low bidder changed the unit cost of one line item from \$950,000 to \$400,000. (See Exhibit O-6) The low bid was only \$19,195 higher than the Engineer Consultant's initial bid estimate of \$9,975,805. The final cost of the contract was \$379,349 less than the bid amount.</p> <p>7) A Certificate of Liability Insurance for 11/01/2019 through 11/01/2020 was not found in e-Builder for Hawkins-Weir Engineers, Inc. (See Exhibit O-7)</p> <p>8) Certificate of Substantial completion was not provided when requested from FSUD. However, FSUD provided a document from Engineer Consultant to Project Engineer regarding the Certificate of Substantial Completion where Contractor requested March 4, 2020 as the date of Substantial Completion. (See Exhibit O-14)</p>	<ul style="list-style-type: none"> Use of materials that do not meet the specifications of the contract could result when invoices and submittals are not compared. 	<p>All documents related to a project should be maintained in e-Builder.</p>		<p>The City does not approve the Trench Safety plan due to legal liability it would place on the City. Per the contract manual the responsibility for using the proper trench safety system lies with the contractor and the city and city's appointed engineer consultant shall be held harmless from any repercussions resulting in improper use or installation of the safety system.</p> <p>The Engineer Consultant's bid estimate is based on data received from previous projects and bids and may change due to new information becoming available.</p> <p>The City saved money by performing value engineering and rebidding the project. The project also came in under the original bid amount. That said, the City does not have any control over the bids submitted by contractors.</p> <p>The insurance certificates had been routed to Purchasing who held the certificate. They are now in e-Builder. Prior Management allowed the engineers to scan documents to the Project folder on the O Drive in place of scanning to E-Builder. This has been corrected and SOP is in place.</p> <p>Agreed: Prior Management allowed the engineers to scan documents to the Project folder on the O Drive in place of scanning to E-Builder. This has been corrected and SOP is in place.</p>

TABLE OF FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS FOR CORRECTIVE ACTION

ISSUE	RISK	RECOMMENDATION	p ¹	SUMMARY OF RESPONSE
<p>9) The Engineer Consultant did not calculate the percentage of time expended to date after Periodic Payment Request # 21 for the period of 3/1/2020 - 4/3/20. Periodic Payment Request # 20 was at 120% of time expended to date, then Periodic Payment Requests #21, #22, & #23 all had 118% of time expended to date. This is another indication of the ambiguity of the Substantial Completion Date. (See Exhibit O-8)</p> <p>10) Contractor submits each Construction Submittal to Engineering Consultant. Engineering Consultant maintains the Submittal Log and provides copies of the Submittal Log monthly to Project Engineer. (See Exhibit O-9)</p> <p>11) Asset # 200024 (16-03-C1 Sub Basin P002, P003 Cap Imp) has an Acquisition cost of \$10,221,475.71. The total cost for project 16-03 from e-Builder is \$11,762,331.43. (See Exhibits O-10 and O-11)</p>	<p>Submittal logs aid in ensuring that all materials and final designs are approved by the Engineer Consultant and/or Project Engineer before being installed.</p>	<p>FUSD should ensure that a monthly Submittal Log is received and uploaded into e-Builder.</p>		<p>Utility Management thanks Internal Audit for this observation and will take it under advisement.</p> <p>Agreed: Prior Management allowed the engineers to scan documents to the Project folder on the O Drive in place of scanning to E-Builder. This has been corrected and SOP is in place.</p> <p>The project total cost includes design, legal, easement/property acquisition, construction, and construction observation. That is the cost in e-Builder. The Finance Department prepares/maintains the City's Fixed Assets. The final determination of if or what services added to the total cost of a project to the fixed asset would be theirs.</p>

Assessment of Observation responses:

- 1) The observation should have read 48 hours and not 24 hours. RFI #6 was requested 24 hours before the date requested to work outside of normal days.
- 2) Management's response, as presented, does not sufficiently address the observation that a document was prepared after the completion of the contract. IA maintains that no documents should have been specifically prepared based upon IA's request for supporting documentation for the approved weather days for the project.
- 3) Periodic on sight random sampling would not require a certified engineer to perform those types of duties and could be performed by a staff construction inspector.
- 4) The transmittal letter acknowledged receipt of the submittal for a particular brand of trench boxes that the contractor planned to use. The transmittal letter only acknowledged receipt of the submittal and not the approval for that specific trench box.
- 5) The engineer consultant's re-bid estimate included the same unit price as the low bidder on the initial bid for 69 line items. The engineer consultant should be able provide reasonable costs and not appear to be adjusting their cost based upon a contractor's cost.
- 6) Based upon the engineer consultant's re-bid cost the value engineering cost was \$1.8 million more than the initial bid estimate. Yes, because the project was re-bid one contractor was able to adjust their bid to near the same cost estimate of engineer consultant's initial estimate.
- 7) no assessment necessary
- 8) no assessment necessary
- 9) no assessment necessary
- 10) no assessment necessary
- 11) IA made this observation so that Management is aware of differences and to ensure all items related to the project are captured correctly. The projects are paid from many different forms (i.e. bond, consent decree, etc...) and ensuring both departments understand what is being captured and the amounts is vital and does not solely rest upon the Finance Department.