

JEA
PIPE BURSTING
MARCH 26, 2004

REPORT #589

OFFICE OF THE COUNCIL AUDITOR
Suite 200, St. James Building



March 26, 2004

Report No. 589

Honorable Members of the City Council
City of Jacksonville

INTRODUCTION

Pursuant to Section 5.10 of the Charter of the City of Jacksonville and Chapter 102 of the Jacksonville Municipal Code, we examined the activities of the JEA Pipe Bursting Contracts and present this report thereon.

The JEA was created for the express purpose of acquiring, constructing, operating, and financing with respect to electric, water, sewer, natural gas and such other utility systems as may be under its control now or in the future. In 1996 JEA committed to spend \$200 million for sewer repair projects. JEA began using pipe bursting as a method of sewer repair in 1999 because of the reduced cost and disruption to their customers. As of September 30, 2003, the JEA Awards Committee has appropriated a total of \$426,964,788 and \$187,049,920 has been expended by JEA for pipe bursting.

In May 1999, PM Construction was used as the contractor for the initial project totaling \$33,680 as a Sole Source. Because of the success of this project in dollar savings, reduced customer disruption, and project completion time, JEA decided to use pipe bursting throughout the City. From 1999 to 2000 the Invitation for Bid process was used to award pipe bursting projects. A total of \$1,888,314, of which \$1.4 million was a demonstration project, was paid to PM Construction, the only vendor awarded work, for pipe bursting services during this time. In February 2000 JEA created a Master Contract, which allowed vendors to become prequalified to bid on pipe bursting work. On February 3, 2000, both PM Construction and Kinsel Industries were approved under the Master Contract, thus qualified to bid on projects. PM Construction and Kinsel Industries bid on four projects under the Master Contract. Each was awarded two projects and received payments totaling \$6,818,089 for PM Construction and \$2,148,968 for Kinsel Industries.

To meet the needs of JEA's Operations and Maintenance department, JEA requested bids for an emergency/maintenance pipe bursting contract. This bid was opened in May 2000 and PM Construction was the low bidder. PM Construction was paid a total of \$12,618,251 for projects granted under the emergency/maintenance pipe bursting contract.

Because JEA was not obtaining the prices that they anticipated for pipe bursting, they partnered with Black and Veatch to perform a study to determine how to decrease prices. This

study found that JEA could save an estimated \$2.5 to \$5.6 million (8% to 18%) based on estimated construction expenditures totaling \$31.4 million and an estimated savings of \$194,300 in bidding and field administration costs per year through the use of a high volume pipe bursting contract. Based on this study, JEA decided to request bids for high volume pipe bursting work. Two companies submitted bids (PM Construction and Kinsel Industries (joint venture) and Southeast Pipe Survey) in September 2000. The bids' totals for one year's worth of work were \$14,844,600 and \$15,385,100. PM Construction and Kinsel Industries, a joint venture, submitted the winning bid of \$14,844,600. On November 20, 2000, JEA signed a 5-year contract with the joint venture that required a minimum 150,000 linear feet of production per year (750,000 feet over the 5-year contract). PM Construction and Kinsel Industries, a joint venture, has been paid a total of \$151,639,263 from October 2000 to September 2003. JEA estimates that it saved 20% through the use of a high volume contract. Based on the \$151,639,263 paid, this would equate to savings of approximately \$37.9 million through the use of a high volume contract. According to JEA officials, they found that after three years of using the high volume contract, the market and the number of companies employing pipe bursting technology had increased. In addition, JEA had fulfilled its contractual obligation under the high volume contract of replacing at least 750,000 linear feet of sewer lines (150,000 for each year of the five year contract). As a result, in January 2003 JEA decided to explore bidding out individual projects to see if further cost savings could be obtained through the bidding out of individual projects. Since that time (January 2003 to September 30, 2003), a total of \$11,903,355 has been paid by JEA for individually bid pipe bursting projects. This has resulted in a reduction of \$1.6 million over the high volume contract price.

STATEMENT OF OBJECTIVES

The objectives of the audit were as follows:

1. To determine that JEA was in compliance with the Purchasing Code and their operational orders in regards to Invitation for Bids and Contracts for Pipe Bursting and to determine that this resulted in the lowest possible price.
2. To determine that all payments for Pipe Bursting work were appropriate.

STATEMENT OF SCOPE

The audit period was January 1, 1999 through September 30, 2003.

STATEMENT OF METHODOLOGY

We selected all pipe bursting bids and awards to test bids. To test payments we extracted a list of all purchase orders issued to pipe bursting vendors from JEA's general ledger system to serve as our universe. To test work orders, we obtained a list of all work orders issued for pipe bursting from JEA to serve as our universe. A statistical sample was selected from each area using the Stat. V.1.1 statistical sampling program based upon a 95% confidence level and an error rate of + or - 5%.

STATEMENT OF AUDITING STANDARDS

We conducted our audit in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity, or function under audit. This audit also included an assessment of applicable management controls and compliance with requirements of laws and regulations when necessary to satisfy audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

AUDIT CONCLUSIONS

We noted the following conclusions for each audit objective:

1. JEA was in compliance with the Purchasing Code and their operational orders in regards to Invitation for Bids and Contracts for Pipe Bursting.
2. The majority of the payments for Pipe Bursting work were appropriate; however, some exceptions were found as detailed below.

AUDIT OBJECTIVE #1

In order to determine that JEA was in compliance with the Purchasing Code and their operational orders in regards to Invitation for Bids and Contracts for Pipe Bursting and to determine that this resulted in the lowest possible price and offered the greatest number of bidders the opportunity to bid on the project, we obtained a list of all bids for our audit period from JEA and selected all pipe bursting bids from this list to ensure that JEA's Purchasing Code and operational procedures were followed. In addition, we examined the contract associated with each bid to ensure that they were drafted in accordance with the Purchasing Code and operational procedures.

Finding #1

JEA was in compliance with the Purchasing Code and their operational orders in regards to Invitation for Bids and Contracts for Pipe Bursting.

Recommendation to Finding #1

There are no recommendations for Objective #1.

Auditee's Response to Finding #1

No Response necessary due to no recommendation by Council Auditor.

AUDIT OBJECTIVE #2

In order to determine that all payments for Pipe Bursting work were appropriate, we randomly selected purchase orders to determine if their payments were made in accordance with the pipe bursting vendor's contract. In addition, all costs posted to pipe bursting work orders were examined to ensure that they were appropriate.

Finding #2

We found that a unit price could not be found in any of the contract documents for 3 (.8%) of the 373 invoices tested. JEA USC Procedure 702 (E)(4) states, “*The Invoice Auditor will verify that the unit price stated on the invoice is the same as the unit price in the signed contract, approved change order or SWA.*” This resulted in the payment of \$6,176.21 without any support for the expenses. Although these appear to be immaterial, there were additional exceptions that were cleared by JEA through documentation provided by the contractor during our audit, but were not available in JEA’s contract documents.

Recommendation to Finding #2

We recommend that JEA determine what was provided for the \$6,176.21 paid to the pipe bursting contractors. In addition, JEA should ensure that there is supporting documentation for all lump sum items listed on invoices before the invoice is approved for payment.

Auditee’s Response to Finding #2

JEA is researching with the contractor to determine if documentation is available to justify the \$6,176.21 paid as lump sum items. If documentation is not available, JEA will request reimbursement from the contractor for same. JEA will review the current payment review procedure that requires either an internal or external independent review of all invoices. The procedure will be revised to ensure that cost reimbursable (lump sum reimbursement) items listed on payment request have supporting documentation before the invoice is approved for payment. Tentative completion: May 15, 2004

Finding #3

We found that the punchlist and/or as-builts were not submitted prior to the final payment for 8 of the 120 (7%) purchase orders tested. This represents 2% of the total dollars expended. It should be noted that of the 8 purchase orders, 3 did not have a punchlist and 5 did not have both a punchlist and as-builts. JEA Production Projects & Engineering Procedure PP&ES 705 (B)(7) states that the Construction Manager, “*Develop and maintain punchlists during project, inspect and record completion of punchlist items and verify that all punchlist items are complete before final payment is made.*” In addition, JEA Production Projects & Engineering Procedure PP&ES (D)(4) states that for a Final Payment, “*The Project Manager is responsible for obtaining concurrence from the Project Engineer that the as-built drawings are submitted and satisfactory.*”

Recommendation to Finding #3

We recommend that JEA create a checklist for each project workbook and ensure that all items related to the project are present prior to final payment.

Auditee’s Response to Finding #3

JEA is currently evaluating reviewing the implementation of a checklist for Final Payment approval versus alternative control mechanisms. The control mechanism determined to be most effective will be inserted into the appropriate procedure for USC wide implementation. Tentative completion: June 1, 2004

Internal Control Weakness #1

We could not easily verify the quantities billed on invoices to the quantities installed on the

project. During our examination of the pipe bursting invoices, we attempted to verify the quantities billed to the quantities reported by the Field Inspector. We were unable to do this because there is not a uniform straight-forward process in place to record the quantities installed.

Recommendation to Internal Control Weakness #1

We recommend that JEA review this process to identify a consistent “best practices” approach to ensure that quantities installed are recorded. Procedures should be documented accordingly.

Auditee’s Response to Internal Control Weakness #1

JEA will review its current processes for verifying quantities installed to quantities billed on invoices. Upon determining a “best practices” methodology, procedures will be revised to reflect the new process, and it will be installed throughout the department. Tentative completion: July 1, 2004

Internal Control Weakness #2

JEA does not have a written procedure that documents the required approvals for payments. During our examination of pipe bursting invoices, we found that in some cases the Project Manager did not sign the application for payment. After discussions with JEA, it was brought to our attention that the Contract Administrator acts as the Project Manager as it relates to the project and is the only one who is required to approve the payment. JEA could not provide the Council Auditor’s Office with a written procedure that dictates this process.

Recommendation to Internal Control Weakness #2

We recommend that JEA develop a procedure that dictates who is delegated the authority for approving payments.

Auditee’s Response to Internal Control Weakness #2

JEA will develop a payment approval delegation procedure to document current practices and insure there is a clear understanding of who is authorized to approve payments to contractors and suppliers. Tentative completion: June 15, 2004

We would like to thank JEA for their cooperation and assistance during the audit.

Respectfully submitted,

Richard Wallace, C.P.A.
Council Auditor

Audit Performed by:

Jennifer Spinelli, C.P.A.
Heather Norsworthy



21 West Church Street
Jacksonville, Florida 32202-3139

April 14, 2004

Richard A. Wallace, C.P.A.
Council Auditor
City of Jacksonville

JEA Response to Audit Findings and Internal Weaknesses
Council Auditor Audit Report #589
JEA Pipebursting Program

We appreciate the professionalism of your audit staff. The feedback provided by your team of auditors will be used to improve our processes and internal controls. We have listed below our responses to your audit findings and internal control weaknesses.

Finding #1:

No response was necessary.

Finding #2:

JEA is researching with the contractor to determine if documentation is available to justify the \$6,176.21 paid as lump sum items. If documentation is not available, JEA will request reimbursement from the contractor for same. JEA will review the current payment review procedure that requires either an internal or external independent review of all invoices. The procedure will be revised to ensure that cost reimbursable (lump sum reimbursement) items listed on payment requests have supporting documentation before an invoice is approved for payment.

Tentative completion: May 15, 2004

Finding #3:

JEA is currently evaluating the implementation of a checklist for Final Payment approval versus alternative control mechanisms. The control mechanism determined to be most effective will be inserted into the appropriate procedure for USC wide implementation.

Tentative completion: June 1, 2004

Internal Control Weakness #1:

JEA will review its current processes for verifying quantities installed to quantities billed on invoices. Upon determining a "best practices" methodology, procedures will be revised to reflect the new process, and it will be installed throughout the department.

Tentative completion: July 1, 2004

Internal Control Weakness #2:

JEA will develop a payment approval delegation procedure to document current practices and insure there is a clear understanding of who is authorized to approve payments to contractors and suppliers.

Tentative completion: June 15, 2004

Respectfully submitted,

Robert Kermitz
Manager, Joint Projects