

Public Works Audit  
Preliminary Findings:  
Temporary Inmate Housing  
& City Hall Elevator Overhaul

Presentation to City Council  
June 19, 2012

Audit Services Department  
City of Chesapeake, Virginia

# I. Background

- In April 2010, Audit Services began an audit of the General Services Department.
- Shortly thereafter, the Director of General Services announced his retirement, and the City Manager disbanded General Services, assigning Facilities Management to Public Works.
- Audit Services agreed to review Facilities Management once we began our audit of Public Works. The Facilities Management portion of the review began in June 2011.

# I. Background (Continued)

- A previous audit (Public Procurement – June 2010) had identified significant issues with scope definition and cost overruns on a contract managed by Facilities Management (HVAC Maintenance).
- Audit Services reviewed the Temporary Inmate Housing project to determine if similar problems were occurring. Significant issues were identified with this project and a City Hall elevator project.
- After discussing this matter preliminarily with the Mayor and the Audit Liaisons in early June 2012, we were asked to provide a presentation on our preliminary findings.

# I. Preliminary Finding – Temporary Inmate Housing

## 1. Temporary Inmate Housing

Finding - Facilities Management did not always fully define the scope of work for contracts and did not always develop a comprehensive, executable plan for its construction projects, nor did it ensure that the contractor always obtained the compliance approvals necessary for the project. As a result, a temporary inmate housing facility project 1) experienced significant cost overruns and 2) could not be used for its intended purpose.

## II. Preliminary Finding – Temporary Inmate Housing

On April 24, 2008, City staff made an emergency purchase determination related to the overcrowding in the City jail and authorized the issuance of a contract to Proteus On-Demand, LLC (Proteus) to provide modular temporary housing units for inmates. Several other contracts were initiated, including one with Techcon, Inc. (Techcon) in January 2009 to provide site preparation and utility connections for these temporary housing units.

## II. Preliminary Finding – Temporary Inmate Housing

### Exhibit 1

#### Temporary Housing Change Orders – Techcon Contract

<b>CHANGE ORDER #</b>	<b>DATE</b>	<b>COST</b>	<b>REASON</b>
Original	1/28/2009	\$488,900.00	Original Contract Cost
1	5/11/2009	\$26,759.96	Fencing, Excavation, Sewer+
2	7/8/2009	\$46,173.68	Reroute Sanitary Sewer
3	8/18/2009	\$83,382.16	Electrical, Fencing, Waterlines+
4	1/22/2010	\$123,354.71	Security System, Pavement+
5	5/4/2010	\$129,566.59	Additional Conduits & Cabling+
6	9/17/2010	\$4,688.64	Security System, Cabling
Change order total		\$413,925.74	
Total		\$902,825.74	

+ Note - Other services were included as well

## II. Preliminary Finding – Temporary Inmate Housing

In addition to the issue with the Techcon change orders, we noted that Facilities Management never ensured that the contractor obtained formal approval from the Virginia Department of Corrections (VDOC) to use the Proteus temporary housing units to house inmates and, as a result, was unable to utilize the units due to non-compliance with VDOC requirements. Since the City was contractually required to make lease purchase payments totaling \$6,300,000 to Proteus for the temporary housing units, the City was obligated to expend a total of \$7,202,806 between the two contracts on temporary inmate housing units it could not use for their intended purpose. The Proteus lease purchase payments began in June 2010 and, as of April 23, 2012 the City had already expended \$3,449,350 on the lease agreement.

## II. Preliminary Finding – Temporary Inmate Housing



**Tensioned Membrane Roof on  
Temporary Inmate Facility**



**No Electronic Locks inside Temporary  
Inmate Facility (Unit A)**

## II. Preliminary Finding – Temporary Inmate Housing

Reason #1 - Facilities Management did not adequately plan and fully develop the scope of work prior to the City entering into the Techcon contract.

“At the onset of the project, it was understood that there would be some work, primarily conduit and cabling, within the housing units that could not be sufficiently defined to include in the utilities bid package due to a lack of information regarding the housing units. We attempted to compensate for this by including some unit prices in the bid. Unfortunately, the scale and quantity of this work was greatly underestimated.”

## II. Preliminary Finding – Temporary Inmate Housing

Reason #2 - In addition, City staff attempted to accelerate the procurement process for what became the Techcon contract. The initial contract was bid out, but subsequent significant changes were not.

“What we require from Purchasing is an understanding that we can interview and select a contractor on an emergency basis before the design is completed and let the contractor help tailor the design to the most efficient performance and to achieve the earliest start. This would preclude the opportunity for even limited competition, but is necessary to buy time during the design... We would like to proceed with selecting a contractor ASAP.”

## II. Preliminary Finding – Temporary Inmate Housing

Reason #3 - The desire to proceed on an emergency basis prior to design and contract completion appears to have been a factor contributing to subsequent cost adjustments on both contracts, and also appears to have contributed to the lack of compliance with VDOC requirements.

“...Proteus personnel reviewed the areas around the jail and advised as to what size structures they could be [sic] provide and what the rated bed count would be. The Sheriff’s staff then requested a cost. Apparently, this cost was to provide what they normally provide. This does not include electronic door locks. I have been told that in other locations where electronic door locks have been installed, it has been done at the Owners request and at a cost beyond the base lease rate. To be fair, neither the Sheriff’s personnel or I new [sic] that they would be required or we would have addressed it earlier. Based on how this all went together, I believe we have to pick up the cost for the electronic door locks.”

## II. Preliminary Finding – Temporary Inmate Housing

Reason #4 - The failure to submit required plans to VDOC was a noted factor in the denial of permission to use the completed units.

“However, the committee was advised of a situation involving the Chesapeake City Jail where it has constructed several temporary housing buildings without having submitted proper documentation or plans to the Board. It was agreed that the Board will send a letter to the Sheriff outlining its concerns.”

## II. Preliminary Finding – Temporary Inmate Housing

Recommendation - Facilities Construction should work with affected City departments on future projects to ensure that the projects are adequately planned and that the scope of work is fully developed. It should also ensure that all required approvals are obtained prior to initiating the contract.

## II. Preliminary Finding – Temporary Inmate Housing

Response – (Will be presented by City Manager's Office)

(See City Manager's Office response at end.)

## II. Preliminary Finding – City Hall Elevator Overhaul

### 1. City Hall Elevator Overhaul Project

Finding - Facilities Maintenance did not develop an adequate scope of work definition that included vendor performance timelines and specifications for its emergency Overhaul/Renovation contract for the City Hall elevators.

## II. Preliminary Finding – City Hall Elevator Overhaul

- On 12/9/2009, the incumbent vendor was awarded an Indefinite Delivery / Indefinite Quantity (ID/IQ) contract for elevator maintenance and repair services. The contract amount was \$41,160.
- On 12/21/2009, an addendum was made to the ID/IQ contract to include an emergency purchase of \$341,500 for the overhaul/renovation of three City Hall elevator systems and the control room. The scope of work did not include any language that defined vendor performance timelines.
- Work on one of the three elevators, the freight elevator, was completed and approved for payment by the City on 4/21/2011 – almost one and a half years after the contract was awarded. The vendor had not started working on the remaining two elevators as of that date.

### III. Preliminary Finding – City Hall Elevator Overhaul

- On 05/05/2011... Public Procurement took the initiative to issue a Cure Notice and Contract Modification to enforce vendor compliance. The Cure Notice established an expected completion date of 85 days after commencing work on an elevator, with liquidated damages for failing to meet the completion timeframe. The vendor completed its overhaul and renovation of the two remaining elevators within the 85 day requirement.
- The freight elevator failed in early 2012 and continued to be out of service as of April 2012. (It became operable again in May 2012.)
- In April 2012, Facilities Maintenance indicated that the vendor would be performing work on the freight elevator and all parts and labor would be covered under warranty. However, Facilities Maintenance agreed to end the contract agreement as soon as possible.
- In April 2012, Public Procurement proceeded to terminate the contract with the vendor for default. A new vendor was selected to repair and overhaul the elevators.

### III. Preliminary Finding – City Hall Elevator Overhaul

Recommendation - For future projects, Facilities Maintenance should ensure that an adequate scope of work definition is developed for each emergency / overhaul / renovation contract. The scope definition should include vendor performance timelines and specifications.

III. Preliminary Finding – City Hall Elevator Overhaul  
Response – (Will be presented by City Manager's  
Office)

## 1. Temporary Inmate Housing

**Finding - Facilities Management did not always fully define the scope of work for contracts and did not always develop a comprehensive, executable plan for its construction projects, nor did it ensure that the contractor always obtained the compliance approvals necessary for the project. As a result, a temporary inmate housing facility project 1) experienced significant cost overruns and 2) could not be used for its intended purpose.**

According to the City's Public Procurement Purchasing Services User Guide (User Guide) published in 2009:

“It is the responsibility of the user department to develop well-defined “**Statement of Work**” (SOW) specifications which describes the requirements by defining the needs to be addressed or problems to be solved; the nature of the work to be performed by the contractor; and the department expectations for the resulting contract.

The SOW becomes part of the solicitation document, and subsequently the contract, so it must be sufficiently clear to let prospective contractors know exactly what is required and what they must do to perform the contract. It must also promote competition to the maximum practical extent. The following are typically included in the SOW:

- The problem(s) the procurement is expected to solve;
- Project goals, requirement, and deliverables;
- The specific nature of the work to be performed;
- Scheduled milestones, events, completion or delivery dates;
- Resources the City will provide;
- A functional specification describing intended capabilities and performance criteria;
- Required compatibilities and connectivity;
- Estimated first-year acquisition costs and life-cycle costs; and,
- Any financial conditions or proposed financing options.”

In addition to the SOW, Facilities Construction (which was part of the General Services Department's Facilities Management Division prior to July 2010) was responsible for oversight and management of the development plan, ensuring that the contractor obtained required compliance approvals for City projects from responsible government agencies, and establishing milestones to develop the language of the SOW within the appropriate procurement vehicle (Request for Proposal or Invitation for Bid) prior to the vendor solicitation process.

On April 24, 2008, City staff made an emergency purchase determination related to the overcrowding in the City jail and authorized the issuance of a contract to Proteus On-Demand, LLC (Proteus) to provide modular temporary housing units for inmates. Several other contracts were initiated, including one with Techcon, Inc. (Techcon) in January 2009 to provide site preparation and utility connections for these temporary housing units.

The Techcon contract's scope of work changed significantly from the initial purpose of site preparation and utility installation to include adding and programming security software compatible with the jail's existing security system and running extensive cabling to support the required electrical systems. We noted that Facilities Management did not solicit bids for the additional work needed to complete these tasks. There were six change orders which increased the total Techcon contract cost from \$488,900 to \$902,826, an 84.6% increase. A chart of the change orders is provided below.

Exhibit 1  
Temporary Housing Change Orders – Techcon Contract

CHANGE ORDER #	DATE	COST	REASON
Original	1/28/2009	\$488,900.00	Original Contract Cost
1	5/11/2009	\$26,759.96	Fencing, Excavation, Sewer+
2	7/8/2009	\$46,173.68	Reroute Sanitary Sewer
3	8/18/2009	\$83,382.16	Electrical, Fencing, Waterlines+
4	1/22/2010	\$123,354.71	Security System, Pavement+
5	5/4/2010	\$129,566.59	Additional Conduits & Cabling+
6	9/17/2010	\$4,688.64	Security System, Cabling
Change order total		\$413,925.74	
Total		\$902,825.74	

+ Note - Other services were included as well

In addition to the issue with the Techcon change orders, we noted that Facilities Management never ensured that the contractor obtained formal approval from the Virginia Department of Corrections (VDOC) to use the Proteus temporary housing units to house inmates and, as a result, was unable to utilize the units due to non-compliance with VDOC requirements. Since the City was contractually required to make lease purchase payments totaling \$6,300,000 to Proteus for the temporary housing units, the City was obligated to expend a total of \$7,202,806 between the two contracts on temporary inmate housing units it could not use for their intended purpose. The Proteus lease purchase payments began in June 2010 and, as of April 23, 2012 the City had already expended \$3,449,350 on the lease agreement.



**Tensioned Membrane Roof on  
Temporary Inmate Facility**



**No Electronic Locks inside Temporary  
Inmate Facility (Unit A)**

(Note: Both items would have to be changed to comply with VDOC requirements)

This situation occurred for several reasons. Facilities Management did not adequately plan and fully develop the scope of work prior to the City entering into the Techcon contract, as indicated by this August 2009 budget increase request letter:

“At the onset of the project, it was understood that there would be some work, primarily conduit and cabling, within the housing units that could not be sufficiently defined to include in the utilities bid package due to a lack of information regarding the housing units. We attempted to compensate for this by including some unit prices in the bid. Unfortunately, the scale and quantity of this work was greatly underestimated.

During the construction period, we experienced an unusual number of underground conflicts, including abandoned foundations and utilities, and known but location uncertain utilities. These have necessitated additional field investigation and redesign/relocation of work.”

In addition, City staff attempted to accelerate the procurement process for what became the Techcon contract. The initial contract was bid out, but subsequent significant changes were not. According to an August 2008 email from the General Services Director to the City Manager’s Office regarding this prospective contract:

“What we require from Purchasing is an understanding that we can interview and select a contractor on an emergency basis before the design is completed and let the contractor help tailor the design to the most efficient performance and to achieve the earliest start. This would preclude the opportunity for even limited competition, but is necessary to buy time during the design. The 50% design submittal was received this week. We would like to proceed with selecting a contractor ASAP.”

The desire to proceed on an emergency basis prior to design and contract completion appears to have been a factor contributing to subsequent cost adjustments on both contracts, and also appears to have contributed to the lack of compliance with VDOC requirements. For example, according to a March 2009 email on the prospective Proteus contract from the Project Manager to the City Manager’s Office:

“Although a purchase order has been issued, technically it is not a change order as we do not yet have contract with Proteus. (Auditor’s Note: Even though an emergency was declared in April 2008, the actual Proteus contract was not issued until July 2009). The additional costs would be added to the lump sum (mobilization) price of the contract. The initial bed capacity and cost was apparently developed through discussions/negotiations between the Sheriff’s staff and Proteus. As I understand it, Proteus personnel reviewed the areas around the jail and advised as to what size structures they could be [sic] provide and what the rated bed count would be. The Sheriff’s staff then requested a cost. Apparently, this cost was to provide what they normally provide. This does not include electronic door locks. I have been told that in other locations where electronic door locks have been installed, it has been done at the Owners request and at a cost beyond the base lease rate. To be fair, neither the Sheriff’s personnel or I new [sic] that they would be required or we would have addressed it earlier. Based on how this all went together, I believe we have to pick up the cost for the electronic door locks.

We have received the additional cost information. They have requested just under \$45,000, of which \$16,800 is for electronic locks (\$2,100/door) for Auxiliary Housing Units A & C.”(Auditor’s Note: These locks have not been installed.)

Finally, the failure to submit required plans to VDOC was a noted factor in the denial of permission to use the completed units, as evidenced by the following excerpt from minutes of the July 21, 2010 Virginia Board of Corrections meeting:

“However, the committee was advised of a situation involving the Chesapeake City Jail where it has constructed several temporary housing buildings without having submitted proper documentation or plans to the Board. It was agreed that the Board will send a letter to the Sheriff outlining its concerns.”

The acceleration of the contracting process appears to have been due at least in part to a desire by the City to bring the facility on-line as quickly as possible so that more inmate labor could help reduce citywide mowing costs in the 2009 mowing season as well as the stated desire to reduce inmate overcrowding. However, the lack of proper planning resulted in facilities that could not be used for their intended purpose. In addition to the cost for the unusable facilities, the project’s inability to address the overpopulation in the City jail may subject the City to additional legal liability related to that overcrowding. Furthermore, failure to adequately plan and fully develop the scope of work on future projects may result in cost overruns on those projects.

**Recommendation - Facilities Construction should work with affected City departments on future projects to ensure that the projects are adequately planned and that the scope of work is fully developed. It should also ensure that all required approvals are obtained prior to initiating the contract.**

The transfer of Facilities Management to Public Works in July 2010 was done at least in part to address the management and oversight issues we identified, and the City was planning to make at least one more attempt to get VDOC approval for the units. In addition, Facilities Construction should ensure that an adequate scope of work is developed for all regular and emergency facility development contracts, including any necessary regulatory approvals, prior to beginning construction or contract initiation, and should also ensure that plans are managed in a manner consistent with the approved plans, so that change orders or other contract adjustments are minimized. These steps will help prevent scope expansion and cost overruns on future projects.

**Response – (See City Manager’s Office response at end.)**

## 2. City Hall Elevator Overhaul Project

**Finding - Facilities Maintenance did not develop an adequate scope of work definition that included vendor performance timelines and specifications for its emergency Overhaul/Renovation contract for the City Hall elevators.**

The User Guide defined an **Emergency Procurement** as follows:

“An emergency is an occurrence of a serious and urgent nature that demands immediate attention because it threatens the health and safety of the public or conservation of public resources. In such situations, the City is authorized to award a non-competitive contract, but may seek such limited competition as is practicable under the circumstances, if time permits. It is important to understand that an emergency does not necessarily constitute a sole source. Department Heads shall immediately contact the Purchasing & Contracts Manager [currently the Public Procurement Officer], or designee, when the emergency is known, for a determination if competition is required. After normal working hours, the department must contact the Procurement Officer to inform him of the situation and if the bids have been obtained.”

The **Vendor Default** process was defined as follows:

“A contractor is considered in default if he or she fails to perform in accordance with the terms and conditions of the contract (e.g., late delivery, nonconformance to specifications); The following factors shall be considered prior to taking any action:

- The specific reasons for such failure;
- The period of time needed to obtain the goods or services from other sources compared to the time delivery or performance could be accomplished by the delinquent contractor. If it is determined that a contractor is in default, a “Notice to Cure” shall be issued by the Purchasing and Contracts Manager or designee.”

Contract agreements should include vendor performance completion timelines and should also have defined liquidated damages to ensure that costs incurred for vendor non-performance may be recovered by the City.

We identified a number of deficiencies related to the scope of work and vendor performance on a City Hall elevator overhaul project. The timeline of events was as follows:

- On 12/9/2009, the incumbent vendor was awarded an Indefinite Delivery / Indefinite Quantity (ID/IQ) contract for elevator maintenance and repair services. The contract amount was \$41,160.

- On 12/21/2009, an addendum was made to the ID/IQ contract to include an emergency purchase of \$341,500 for the overhaul/renovation of three City Hall elevator systems and the control room. The scope of work did not include any language that defined vendor performance timelines.
- Work on one of the three elevators, the freight elevator, was completed and approved for payment by the City on 4/21/2011 – almost one and a half years after the contract was awarded. The vendor had not started working on the remaining two elevators as of that date.
- On 05/05/2011, approximately 18 months after the award of the contract, Public Procurement took the initiative to issue a Notice to Cure and Contract Modification to enforce vendor compliance. The Notice to Cure established an expected completion date of 85 days after commencing work on an elevator, with liquidated damages for failing to meet the completion timeframe. The vendor completed its overhaul and renovation of the two remaining elevators within the 85 day requirement. Facilities Maintenance approved the completion of work for all three elevators and approved invoices for final payments to the vendor.
- The freight elevator failed in early 2012 and continued to be out of service as of April 2012. (It finally became operable again in May 2012.)
- In April 2012, Facilities Maintenance indicated that the vendor would be performing work on the freight elevator and all parts and labor would be covered under warranty. However, Facilities Maintenance agreed to end the contract agreement as soon as possible. The Facilities Maintenance Administrator indicated that this vendor had provided good inspection and maintenance service until recently.
- In April 2012, Public Procurement proceeded to terminate the contract with the vendor for default. A new vendor was selected to repair and overhaul the elevators.

The emergency work on the City Hall elevators was delayed and substandard for several reasons. Facilities Maintenance did not solicit separate bids for the elevator overhaul project and did not evaluate other options such as complete elevator replacements. This led to the awarding of the contract to a vendor unable to perform. In addition:

- Vendor performance timelines and ramifications for vendor non-performance were not included in the contract's scope of work;
- Vendor performance was not enforced in a timeframe consistent with an emergency contract.
- Contract and job performance was not monitored in an adequate or timely fashion.

As a result of this situation, the City Hall Building did not have a fully functioning freight elevator for more than two years. This left the City with concerns about the reliability of the other two elevators, and safety issues in the event the building needed to be evacuated quickly for any reason.

**Recommendation - For future projects, Facilities Maintenance should ensure that an adequate scope of work definition is developed for each emergency/overhaul/renovation contract. The scope definition should include vendor performance timelines and specifications.**

The City should ensure that emergency procurements are reserved for true emergencies, as (arguably) opposed to their use in the temporary housing and elevator repair projects. Given the vendor's lack of ability to repair the elevators, Facilities Maintenance should ensure that an adequate scope of work definition including performance timelines and standards are included in all future maintenance contracts and should work with Public Works and Public Procurement to document and develop sufficient and fully executable plans, scopes of work, and vendor performance timelines. Additionally, Facilities Maintenance should enforce vendor performance and work with Public Works to terminate contracts for default in a more timely fashion should they find that the vendor is unable to perform in a satisfactory manner.

**Response - (See City Manager's Office response at end.)**

## Changes to Procurement and Contract Management Implemented Since 2008

- ✦ In April 2009 Council approved an ordinance directing the Procurement Administrator to be appointed by the City Manager or his designee, therefore denoting the Purchasing Office would report directly to the City Manager's Office.
- ✦ A new Procurement Administrator was hired in 2009 who has aggressively made changes to the division including:
  - Consulting regularly with City Attorney's Office on procurement matters for legal advice
  - Reorganizing the office for efficiencies
  - Providing external and internal training on procurement practices. The additional City staff training has reinforced proper procurement processes and compliance with City ordinances and the State procurement laws.
  - Developing a SWAM contractor program
  - Reviewing the city's purchasing manual and policies and procedures.
- ✦ In 2010 the General Services Department was reorganized and the facilities functions were broken into two divisions under Public Works – Facilities Construction and Facilities Maintenance. These have been integrated into Public Works, streamlining and standardizing their project management, purchasing and accounting practices into the American Public Works Association (APWA) accredited Public Works Department's well established policies and procedures.
- ✦ Public Works hired a very experienced private sector engineer as Facilities Construction Manager to then head the division. He possesses in-depth experience it in correctional and other public safety facilities----one of the most complex and costly areas of core services infrastructure.
- ✦ Change order processing continues to be closely reviewed with all change orders over 15% being reviewed by the Purchasing Office, Finance, Budget, Procurement, City Attorney and approved by the City Manager's Office.
- ✦ Regular training on policies and procedures implemented