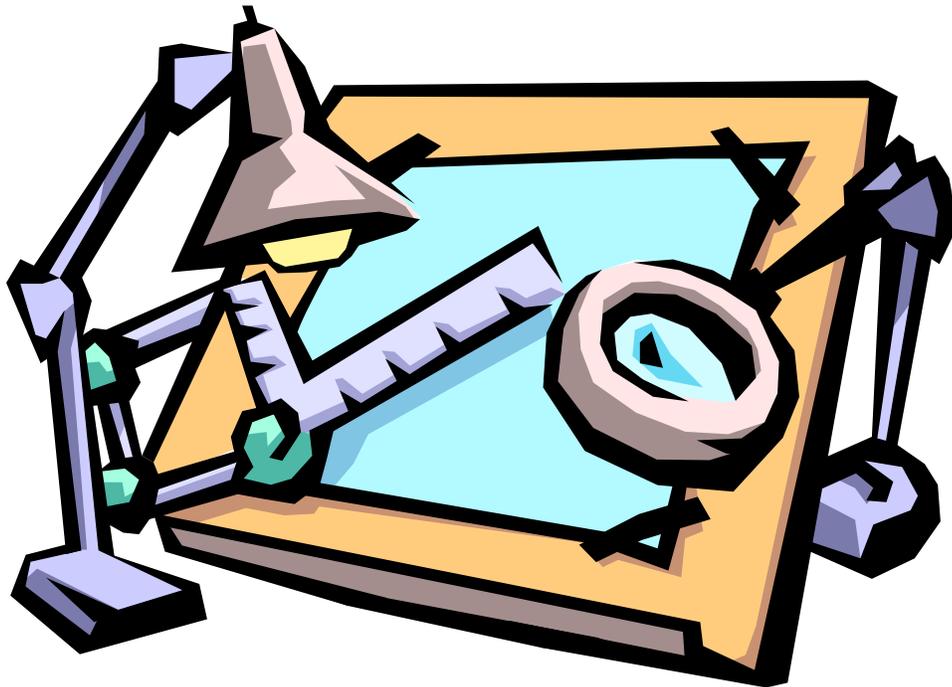


**CITY OF FORT LAUDERDALE
INTERNAL AUDIT OFFICE
AUDIT REPORT**

**Review of
CH2M Hill's Internal Controls
used over the
Water Works 2011 Program**



**AUDIT NO. 03/04-XX-09
DATED April 28, 2004**

MEMORANDUM NO. 04-43

DATE: April 28, 2004

TO: Acting Public Services Director/Cecilia Hollar

SUBJECT: *Review of CH2M Hill's Internal Controls used over the Water Works 2011 Program*

Enclosed is the "subject" Final Report of Audit.

Allyson C. Love
Internal Audit Director

Attachment - Final Report of Audit

c: City Commission
Acting City Manager/Alan Silva
Assistant City Manager/Bud Bentley
Finance Director/Terry Sharp
Assistant Utilities Services Director/Engineering/Paul Bohlander, P.E.

ACL/cs

REPORT OF AUDIT No. 03/04-XX-09

DATE: February 26, 2004

TO: Acting Public Services Director/Cecelia Hollar

VIA: Internal Audit Director/Allyson C. Love

FROM: Assistant Internal Audit Director/James Hamill

SUBJECT: *Review of CH2M Hill's Internal Controls used over the Water Works 2011 Program*

BACKGROUND

The City of Fort Lauderdale ("City"), by agreement dated October 18, 2001, contracted with CH2M Hill, Inc. (herein "Contractor/CH2M Hill"), a Florida Corporation, to provide professional engineering services in a consultant capacity and act as the Program Manager for the Water and Wastewater Master Plan Capital Improvement Program (CIP), Project 10365 (aka Water Works 2011). Water Works 2011 is an ambitious, accelerated CIP to provide sewer services to approximately 40% of the City, which is presently unsewered, and major infrastructure improvements to the existing Peele-Dixie and Fiveash water treatment plants. The anticipated scope of CH2M Hill's work includes:

- Coordination of design and construction services during implementation of the program;
- Establishment of a master construction schedule;
- Review and approval of design consultant and construction contractor's invoices;
- Preparation of monthly cash draw projections;
- Monitoring of construction related expenditures; and
- Public outreach and communication to the residents affected by the program.

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SCOPE

The overall objective of our review was to determine if CH2M Hill has adequate internal controls in place, to reasonably assure: 1) program objectives will be achieved efficiently and effectively; and 2) City assets are appropriately safeguarded. We reviewed documents & transactions from May 2002 through November 2003. The review was performed intermittently between December 2002 – November 2003 according to generally accepted government auditing standards.

OVERALL EVALUATION

CH2M Hill has adequate internal controls in place to manage the Waterworks program; however, we did identify that the City has not taken advantage of a Direct Purchase Program which could result in significant cost savings. We also noted existing controls could be improved to establish accountability, security and business continuity in relationship to CH2M Hill's Disaster Recovery Plan and to assure payments are efficiently and effectively processed and approved. Furthermore, CH2M Hill has not implemented certain internal control elements to run their day to day operations.

FINDING 1

The City's Water Works 2011 Capital Improvement Program effort has not taken advantage of a Direct Purchase Program to avoid the payment of sales tax on public works project material and equipment.

Sales and Use Tax/Tax Information Publications 02A01-02 issued March 26, 2002 states Governmental entities may structure contracts to avoid sales tax on public works project materials by purchasing those materials directly from the supplier rather than having the contractor make those purchases. At this time, a direct purchase program is the only way to avoid the sales tax on materials incorporated into a public project.

Florida Statutes, Section 212.08 (6) contains basic requirements to qualify for the direct purchase exemption:

- ✓ *The government must take title directly from the supplier upon delivery rather than from the contractor after the job is completed;*

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- ✓ *The government rather than the contractor must bear the risk of loss of the materials, which is generally established through the contract provisions concerning casualty insurance;*
- ✓ *The government must issue its own purchase order directly to the supplier;*
- ✓ *The government must provide the supplier with a copy of the government's exemption certificate;*
- ✓ *The supplier's invoice must be addressed to the governmental entity, not the contractor; and*
- ✓ *Payment must be made by the government directly to the supplier.*

The Water Works 2011 Program began in the Spring of 2002 and is expected to continue through 2011. The Water Works 2011 Program Cost is estimated to be \$550 million and a significant portion of this cost will include materials and equipment. The equipment and materials cost could be exempted from Florida sales tax under a Direct Purchase Program.

Based on preliminary discussions with City/CH2M Hill staff, it appeared they were open to the concept of a Direct Purchase Program; however no concrete actions have taken place to date to fully implement a pilot program.

Implementation of a Direct Purchase Program could result in significant cost savings over the life of the Water Works 2011 Capital Improvement Program and could benefit other Citywide capital improvements efforts.

RECOMMENDATION 1

The City's Program Manager should coordinate the implementation of a Direct Purchase Program with the City's Manager of Procurement and Materials Management, CH2M Hill's Program Management Team (PMT) and the City Attorney. A pilot project should be identified and tested to demonstrate a commitment to full implementation of a Direct Purchase Program.

MANAGEMENT COMMENT

Management concurred in principle with the finding and recommendation and stated: "Based on our knowledge and experience in the areas of construction procurement and construction management, we are cautious in

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our approach to implementation of a Direct Purchase Program. As a result, while we have not established a formal pilot program in pursuit of sales tax savings, we have taken advantage of this opportunity in two recent projects – direct purchase of 54-inch pipe (materials), and direct purchase of the water treatment membranes (equipment) for the Peele-Dixie Water Treatment Plant (WTP).

Direct purchase in these cases was determined to be uniquely beneficial. Construction of the 54-inch pipe needed to be expedited in order to be complete prior to construction of surface improvements by a developer over the pipe path (i.e., the easement area in which the pipe was to be constructed). Direct purchase of the pipe enabled us to reduce the time period between award of the construction contract and delivery of the pipe, by allowing us to award the pipe purchase, and initiate manufacture of the pipe simultaneous to completion of the design, bidding and award of the construction contract.

Direct purchase of the membranes was desirable for similar reasons – i.e., procurement and testing of the membranes (which are essentially plug-in type components of a membrane WTP design) could be initiated prior to completion of the design, permitting, bidding and award of the construction contract for the entire plant. As a result, delays associated with procurement and testing of the membranes following completion of the design, bidding, and award process could be avoided.

In addition, these were major materials/equipment purchases (\$150,700 for the 54-inch pipe, and \$1,045,000 for the Peele-Dixie membranes), which resulted in significant sales tax savings. However, in the absence of the unique factors described above, and in the case of the membrane procurement, without extensive contract complexity (and likely associated additional costs), sales tax savings associated with direct purchase certainly are not assured.

In fact, there are many potential disadvantages associated with direct purchases in conjunction with public works/utilities construction projects, as follows:

- City purchase price may not be as good as contractor purchase price;

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- Contractor bid prices for installation/construction only (without materials purchase) may not be as good as bid prices for installation/construction including materials purchase;
- Claims potential associated with delayed delivery and/or defective materials would be significant;
- Direct purchase management (general administration, procurement, inventory, etc.) would require additional internal resources and add internal costs (insurance and risk management), and would result in additional schedule challenges;
- Issues of material/equipment use, theft, loss, and/or waste would place an added burden on construction management resources, and would be an additional source of contention between owner and contractor;
- Concept would appear to be contrary to efforts to privatize – i.e., contractors are currently managing procurement of materials/equipment, receipt, inventory, etc.

These management and other risk-related potential costs can quickly equal or exceed anticipated sales tax savings. That said, we will continue to pursue opportunities to realize sales tax savings where it is clearly in the City's best interests to do so, as with the examples above. Toward assuring we do so, the following action is proposed:

We will develop a process for all future projects under *WaterWorks 2011* whereby we will evaluate Direct Purchase of any particular material or equipment with a value exceeding \$500,000. Items less than this threshold which represent opportunities to optimize project delivery goals will also be considered. The process will include identification of all materials and/or equipment with an anticipated value exceeding \$500,000 for any one item in a project, an evaluation of the pros and cons of Direct Purchase of each type of material and/or piece of equipment, and a decision regarding Direct Purchase of that material and/or equipment. Documentation of such decisions regarding Direct Purchase will be filed with other information, and will be compiled in a Direct Purchase Program file.

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This process will be developed, including development of evaluation forms, and establishment of the evaluation procedure in the Program Design Manual.” Estimated completion date June 30, 2004.

FINDING 2

Internal audit was unable to determine the adequacy of CH2M Hill’s Disaster Recovery Plan since certain key controls to establish accountability, security and business continuity were not evident.

A robust, thoroughly tested back-up disaster recovery plan is a significant and essential element of a strong system of internal controls.

Condition Noted	Internal Control Weakness/Impact
Sentry Fire Safe(s) are used to store the rotational back-up files. The Owner’s Manuals for the safe(s) are stored in the unlocked desk drawer of the Network Analyst and the combination numbers to the safe(s) are clearly marked on the face of the manuals.	Security/Accountability
CH2M Hill routinely backs up their daily transaction files from Monday – Thursday and on Friday they write a full back-up to capture all transactions since the prior week’s full back-up. A test to restore the full back-up by appending the daily transactions files to the previous full back-up has not been accomplished.	Business Continuity/System Integrity
CH2M Hill does not separately write a back-up file for Friday’s transactions	Business Continuity

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Condition Noted	Internal Control Weakness/Impact
since it is included with the weekly full back-up (noted above). Thus, the ability to fully recover all data is impaired.	

Without detailed testing to confirm the backup/disaster recovery plan functions as expected, the ability to fully and easily recover from an actual disaster is not assured.

**RECOMMENDATIONS AND
MANAGEMENT COMMENTS**

The *City's Program Manager* should require *CH2M Hill's Manager of Finance and Controls* to:

Recommendation 2. *Conduct a test to ascertain the back-up recovery procedure is functioning as intended. A sample of different entries for various transaction types (payments, change orders, budget adjustments etc.) should be randomly chosen and tested as follows:*

A recovered file should be created by appending to a previous full back-up the differential (incremental) changes. Then the selected transactions from the random test group should be verified in the recovered file to determine if file reflects the expected value for each transaction. For example:

Previous YTD Payments	Change Payments	Expected Value	Recovered File	Difference
\$1,000.00	\$200.00	\$1,200.00	\$1,000.00	\$(200.00)

Management Comment. *Management concurred in principle with the finding and recommendation and stated:* “The Program's Internal Control Analyst has conducted monthly tests of the back-up recovery procedure.

The back-up recovery procedure cannot be tested as described in the recommendation because the system does not capture individual data item changes, but rather the complete and updated version of all files which changed during a specified time period (i.e., a day).

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However, the Program has recently purchased the software Beyond Compare version 2.1.2, which will be used to test the restore capability of system back-up tapes. This software tests for file size, time/date stamp and cyclic redundancy check and produces a printable log, which will provide for hard copy documentation of the test results. A monthly schedule of testing will also be continued.” **This item is closed.**

Recommendation 3. *Create a differential record of Friday’s transactions detail prior to writing the weekly full back-up to assure Friday’s transaction detail will not be lost.*

Management Comment. *Management concurred in principle with the recommendation and stated:* “The Program’s current back-up recovery procedure, which requires a differential back-up be created Monday through Thursday, and a full back-up on Friday, fully complies with CH2M HILL’s standard for system back-up. As an additional element of system redundancy, the Expedition based document control files are locked up each night on CH2M HILL’s Deerfield Beach server.

From a system perspective, the situation in which a Thursday differential tape is corrupted vs. a Friday full back-up, represents essentially the same exposure - the difference being a day’s worth of changes based on the current tape drive configuration (single back-up tape drive). The recommendation to perform a differential back-up on Friday (evening) followed by a full back-up would require the tape to be manually changed. In turn, to accomplish this it would either be necessary for Program personnel to work overtime on Friday evening or that the system be shut down in time to accomplish the tape change-out before close of business on that day. As an alternative, a second tape drive, which would eliminate the need to manually change the tape, could be leased at a cost of approximately \$100.00 per month.

Therefore, to fully comply with the Internal Audit recommendation, the Program will acquire via a supplemental task order, a second tape drive. We believe this alternative represents the most cost-effective situation over the long-term, as it avoids Program personnel working overtime and the scheduling conflicts which would inherently occur.” **Estimated completion date June 30, 2004.**

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Recommendation 4. *Instruct the Network Analyst to store the owner’s manual for each of the safes in a locked cabinet with restricted access.*

Management Comment. *Management concurred with the recommendation and stated:* “The owner’s manuals for each of the safes are now stored in a locked cabinet with restricted access.” **This item is closed.**

Recommendation 5. *The operating procedure should be updated to delete the following reference: “The weekly back-up tapes are stored in CH2M Hill’s Deerfield Beach Office”. The replacement language should explain that the weekly back-up tapes are stored in a locked fire safe in the computer room on the 6th floor of City Hall. Additionally, the procedure should indicate that the daily differential tapes are stored in a locked fire safe in the Program Management Office, 3rd floor, 200 N. Andrews Ave.*

Management Comment. *Management concurred with the recommendation and stated:* “The wording of the procedure has been changed per the Internal Audit recommendation.” **This item is closed.**

FINDING 3

Internal controls were not adequate to assure payments are efficiently and effectively processed and properly approved.

Based on our review of 53 construction/non-construction invoices totaling \$9,996,723 from 5 different vendors, we noted the following concerns:

Problem Identified	# Tested	%	Criteria - Florida Statutes Chapter 218 Prompt Payment Act
Construction invoices paid late (normal).	6	11%	Twenty-five business days after the payment request is received.
Construction invoices paid late (rejected).	9	17%	Ten business days after the date the corrected payment request/ invoice is received.
Non-construction invoices paid late. (rejected).	1		Forty-five days after the payment due date.
Non-construction invoices paid late (original).	8	15%	Ten business days after the date the corrected payment request/ invoice is received.
No evidence of approval.	17	32%	Authorized Approvals per CH2M Hill’s Payment and Process Procedures.

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Problem Identified	# Tested	%	Criteria - Florida Statutes Chapter 218 Prompt Payment Act
No date to evidence when approved.	7	13%	Per Normal Operating Procedures.

Post implementation testing of actual transactions was never accomplished to determine if the established procedures would ensure payment of vendor invoices within the timelines indicated by the Prompt Payment Act. Furthermore, verification all signatures/dates are affixed to payment documents is not always accomplished by the Internal Control Analyst prior to submission to Accounts Payable.

Properly approved and efficiently processed invoices will facilitate compliance with the Florida Prompt Payment Act, avoid interest and protect the City from paying for unsatisfactory work.

RECOMMENDATIONS AND MANAGEMENT COMMENTS

Recommendation 6. *CH2M Hill’s Program Management Team should strengthen internal controls to assure more efficient and timely processing of vendor invoices. Alternate processing procedures should be developed to flag and expedite the processing of corrected, resubmitted invoices to assure compliance with the Florida Prompt Payment Act.*

Management Comment. *Management concurred in principle with the issues pertaining to compliance with the Prompt Payment Act and will work toward collective compliance and stated the following: “Management disagrees with the finding that “Internal Controls are not adequate to assure payments are efficiently and effectively processed and properly approved”.*

We feel that the Internal Controls in place are more than adequate given the circumstances discussed below. Also, based upon the following information, we do not believe that there is a need to develop alternate processing procedures to expedite the processing of corrected invoices.

The Program has based its adherence to the Florida Prompt Payment Act on the criteria that the Payment Due Date, as defined in Section 218.74, is the date an invoice is officially transmitted to the City of Ft. Lauderdale (Public Services and Finance Departments located at 100 N. Andrews Ave. – City Hall) for payment.

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We adhere to this particular date because after a given invoice is transmitted to the City for payment, it is then processed further by both Public Services and Finance prior to being paid. For a number of reasons, this further processing, for the sample reviewed by Internal Audit, ranged from 5 to 71 days.

While the Program has limited ability to influence the activities of other city departments, we will meet with Engineering and Finance for the purposes of making them aware of the issue raised in the audit report relative to the prompt payment act and explore any opportunities to expedite the process toward assuring collective compliance. In addition, we will develop a quarterly report which will allow us to monitor the overall status of payment processing for design consultant and contractor payments in order to identify the need for any additional actions in the future.

Specific comments related to the Table¹ included under Finding #3 with regards to the Program's adherence of the Florida Prompt Payment Act are as follows:

1. Construction Invoices paid late (normal) – (Note: The results of this item should be 6 (11%) as opposed to 9 (17%) based upon back-up provided by Internal Audit. The results for items 1 and 2 were transposed in the table).

Based on our analysis of the sample invoices included in the Audit, and using the Program's calculated Payment Due Date, 1 invoice (2%) could be categorized as being processed late from this category.

2. Construction Invoices paid late (rejected) – (Note: The results of this item should be 9 (17%) as opposed to 6 (11%) based upon back-up provided by Internal Audit. The results for items 1 and 2 were transposed in the table).

Based on our analysis of the sample invoices included in this Audit, and using the Program's calculated Payment Due Date, 1 invoice (2%) could be categorized as being processed late from this category.

¹ The Draft Report of Audit table contained transposition errors; the Final Report of Audit was corrected to reflect correct statistics based on the problem indentified.

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3. Non-construction Invoices paid late (rejected) – We agree that 1 invoice (2%) can be categorized as being paid late from this category.

It should be noted that from the Program's review of the Florida Prompt Payment Act, we could not specifically determine the number of days in which a **rejected** and subsequently resubmitted **Non-Construction** invoice must be paid.

4. Non-construction Invoices paid late (original) – Based on our analysis of the sample invoices included in this Audit, and using the Program's calculated Payment Due Date, 3 invoices (5.6%) could be categorized as being processed late from this category.

The average amount of time to process the Construction Invoices in the sample (using the Program's calculated Payment Due Date) was 10.7 business days.

The average amount of time to process the Design Consultant Invoices in the sample (using the Program's calculated Payment Due Date) was 24.5 calendar days.

The Program strives to process Contractor payment applications and Design Consultant invoices within the guidelines of the Florida Prompt Payment Act while simultaneously adhering to the 4 and sometimes 5 levels of approval required by our Payment Process Procedures. The Program also strives to expedite approval of invoices and payment applications that have been previously rejected.

To date, the Program has been successful in cultivating positive on-going business relationships with each of our Design Consultants and Contractors. To our knowledge, there has been only one instance in which a contractor has threatened to seek remedy under the Florida Prompt Payment Act. Meetings with the Contractor and Program representatives resulted in a positive outcome to the situation.

Of the over \$33,900,000 of invoices processed to date on the Program, no action has been brought, and no interest has been paid under provisions of the Florida Prompt Payment Act. The Program is not aware of any problems stemming from the timing of processing invoices.

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With respect to the Internal Control Analyst's verification that all signatures/dates are affixed to the payment documents, the following should be noted:

5. No evidence of approval / & 6. Approval Date – While it is true that in a few cases, signatures and dates were missing on the rejection/approval form itself, the underlying Progress Draw or Invoice was signed by all who were required to do so.

Furthermore, because these underlying Invoices and Progress Draws themselves are the official documents for which approval by signature is required in order to be paid by the City, we do not agree with the assertion in Finding 3 that the City had possibly paid for unsatisfactory work in any of the samples noted in the Table.

The Contractor Payment and Design Consultant Request Receipt & Approval/Rejection Forms were not designed to be the document that is officially approved via signature. As discussed below, this form was created as a transmittal mechanism to show that the Inspectors, Design/Construction Project managers, and Design Construction Program managers had reviewed and approved the invoices. The form does not accompany the invoice to the City.” **This item is closed.**

Recommendation 7. *The Contractor's Payment Approval/Rejection form should be revised to include a signature line for the Internal Control Analyst (ICA) and the ICA should initial the Pay Request/Progress Draw to evidence the calculations to support the progress draw are correct.*

Management Comment. *Management concurred with the recommendation and stated:* “The Contractor's Payment Approval/Rejection form will be revised to include a signature line for the ICA.

For over a year, the ICA has been initialing the Pay Request/Progress Draws in order to evidence to the City Program Manager and the City's Public Services Department that calculations to support these invoices are correct.”
Estimated completion date June 30, 2004.

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FINDING 4

CH2M Hill’s Internal Control Work Plan contains certain internal control elements which have not been implemented as part of the day to day management of the program.

A logically conceived work plan with cost effective internal controls, which accurately reflect how transactions are processed, will yield substantial control benefits.

Control Elements per CH2M Hill’s Internal Control Work Plan/Contractor Payment Procedures	Condition Noted based on Internal Audit Inquiry
Perform preliminary risk assessment to identify high-risk areas.	No risk tool has been established by CH2M Hill to specifically address major risk areas.
Identification of control weaknesses and opportunities for contract fraud & abuse.	No written fraud and abuse policy has been established by CH2M Hill and no specific tests are performed to readily identify fraud and abuse. (Exhibits A/B)
Identify related parties and related party transactions.	CH2M Hill has a Business Conduct Policy which requires employees to bring to the attention of management all conflicts of interest (related party and related party transactions); however, employees do not have to acknowledge receipt of the policy via a signature and comprehensive training on the policy has not been provided. Furthermore, no mechanism exists to annually update potential conflicts.
The Program will create a Supervisor of Inspection position that will be dedicated to: (1) development and implementation of consistent inspection procedures on a program wide basis; and (2) review of inspector performance activities to ensure compliance with program policies and procedures.	No Supervisor of Inspection Position has been created/established. Based on internal audit findings, we identified issues which support why this position should be created, as follows: (1) payments were made without necessary testing being completed and documented in the project files; and (2) payments were made before satisfactory resolution of disputed field conditions.

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The internal control work plan is significant to an overall assessment and understanding of the control structure and control environment and the value and importance of the work plan is diminished to the extent that it does not accurately reflect actual practices. Well-expressed intentions without linkages to actual practices do not result in meaningful control activities.

MANAGEMENT COMMENTS AND RECOMMENDATIONS

The *City's Program Manager* should require *CH2M Hill's Program Management Team* to:

Recommendation 8. *Develop a risk tool and identify specific risk factors. The results of the risk assessment would be useful in planning and prioritizing internal control activities and in monitoring of control systems.*

Management Comment. *Management concurred with the finding and recommendation and stated:* “The Program believes it has performed an adequate risk assessment that has been instrumental in the planning and prioritization of internal control activities to date. As indicated in the Internal Control Work Plan, Overview of Methodology section, the Program’s review approach included performing a preliminary risk assessment to identify high-risk areas. The specific, relevant, risk factors that were identified related directly to invoice payments for Design Consultants and Contractors.

It should be noted that risk areas identified via the Program’s risk assessment parallel the emphasis of the Program audits performed by the City’s Internal Audit Department.

Following the identification of these risk factors, the Program instituted the following policies and procedures that deal exclusively with processing of Design Consultant and Contractor Invoices:

Design Consultant Payment Process – Program Manual Section 9.8
Contractor Payment Process – Program Manual Section 9.9

In addition, several other sections of the Program Manual contain policies that relate directly or indirectly to the review procedures for Design Consultant and Construction Invoices. These policies and procedures are

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updated continuously as the Program goes forward and as experience dictates. The City of Ft. Lauderdale's Internal Audit Department has also made several recommendations through their Audits that the Program has incorporated into its policies and procedures.

The Program has and will continue to reevaluate and reaffirm its risk assessment criteria given current activity levels and the evolution of the Program to this point in time. As noted above, policy and procedures have been updated as experience has dictated and lessons have been learned. To assist in the accomplishment of this goal in the future, the Program will develop a risk assessment tool to assist in the identification and evaluation of specific risk factors. **Estimated Completion Date June 30, 2004.**

Recommendation 9. *Perform a fraud check-up and establish a written fraud policy. The Policy should be clearly communicated to all employees to assist in the early detection and prevention of fraud.*

Management Comment. *Management concurred with the recommendation and stated:* "The Program feels that the existing Internal Controls and Business Conduct Policies in place provide appropriate directive to deter fraud and safeguard the City's assets.

Given that fraud is not 100% preventable even with the most diligent of Internal Controls in place and tempered by the knowledge that prevention is the most effective deterrent to fraud, the Program will develop a written fraud policy. A related fraud check-up list, tailored to the specific needs of this Program, will be developed concurrently with this policy." **Estimated completion date June 30, 2004.**

Recommendation 10. *Establish a written policy to require employees, via signature, to evidence receipt of the Business Conduct Policy. Consideration should also be given to the establishment of an annual self-disclosure mechanism to report potential conflicts of interest.*

Management Comment. *Management concurred with the recommendation and stated:* "The Program will require all employees to sign the Program Business Conduct Policy." **Estimated completion date June 30, 2004.**

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Recommendation 11. *Create a Supervisor of Inspection to assist in the overall quality of the inspection program.*

Management Comment. *Management concurred in principle with the recommendation and stated:* “To date, and going forward, the Program will rely on the individual Project Construction Managers (CM) to serve in a supervisory capacity over the individual Resident Project Representatives (RPR) assigned to their specific projects. In this capacity, the CM has and will continue to oversee the RPR’s primary responsibilities with respect to the individual construction contracts.

As the Program enters its peak construction period, we will be incorporating the concept of the Supervisor of Inspection position into the City Engineering Inspection Supervisor’s responsibilities in the near future. This position will be titled Technology Lead for Resident Project Representatives and will place additional emphasis on independent oversight review for all RPRs and inspectors, City and otherwise. The Program will develop a list of responsibilities to incorporate into this position. **Estimated completion date June 30, 2004.**

EVALUATION OF MANAGEMENT COMMENTS

Management comments provided and actions taken and/or planned are considered responsive to the recommendations.

CONTRACTOR FRAUD PREVENTION CHECK-UP	
<p>ORGANIZATION: _____</p> <p>DATE OF CHECKUP: _____</p> <ul style="list-style-type: none"> • Monitor compliance with the code of conduct and participation in the related training. Monitoring may include requiring at least annual confirmation of compliance and auditing of such confirmations to confirm accuracy and completeness. • Independent test of product quality to minimize the chance substitution of inferior/substandard material(s). • Periodic independent re-testing to minimize the chance of falsified positive test results. • Periodic independent observation of the collection of samples to prevent “special” reusable inspection samples. • Obtain vendor certifications that materials meet and/or exceed performance specifications. • Verify non-allowable charges are not concealed with allowable charges. • Match employee/consultant addresses with vendor addresses. • Review situations where competing bidders become sub-contactors of the General Contractor post award. 	<p>RESULTS</p>

THE ACFE FRAUD PREVENTION CHECKUP

ENTITY: _____

DATE OF CHECKUP: _____

RESULTS

1. Fraud risk oversight

- To what extent has the entity established a process for oversight of fraud risks by the board of directors or others charged with governance (e.g., an audit committee)?

Score: From 0 (process not in place) to 20 points (process fully implemented, tested within the past year and working effectively).

2. Fraud risk ownership

- To what extent has the entity created “ownership” of fraud risks by identifying a member of senior management as having responsibility for managing all fraud risks within the entity and by explicitly communicating to business unit managers that they are responsible for managing fraud risks within their part of the entity?

Score: From 0 (process not in place) to 10 points (process fully implemented, tested within the past year and working effectively).

3. Fraud risk assessment

- To what extent has the entity implemented an ongoing process for regular identification of the significant fraud risks to which the entity is exposed?

Score: From 0 (process not in place) to 10 points (process fully implemented, tested within the past year and working effectively).

THE ACFE FRAUD PREVENTION CHECKUP

RESULTS

4. *Fraud risk tolerance and risk management policy*

- To what extent has the entity identified and had approved by the board of directors its tolerance for different types of fraud risks? For example, some fraud risks may constitute a tolerable cost of doing business, while others may pose a catastrophic risk of financial or reputational damage to the entity. The entity will likely have a different tolerance for these risks.
- To what extent has the entity identified and had approved by the board of directors a policy on how the entity will manage its fraud risks? Such a policy should identify the risk owner responsible for managing fraud risks, what risks will be rejected (e.g., by declining certain business opportunities), what risks will be transferred to others through insurance or by contract, and what steps will be taken to manage the fraud risks that are retained.

Score: From 0 (processes not in place) to 10 points (processes fully implemented, tested within the past year and working effectively).

5. *Process level anti-fraud controls/ re-engineering*

- To what extent has the entity implemented measures, where possible, to eliminate or reduce through process re-engineering each of the significant fraud risks identified in its risk assessment? Basic controls include segregation of duties relating to authorization, custody of assets and recording or reporting of transactions. In some cases it may be more cost-effective to re-engineer business processes to reduce fraud risks rather than layer on additional controls over existing processes. For example, some fraud risks relating to receipt of

THE ACFE FRAUD PREVENTION CHECKUP

RESULTS

funds can be eliminated or greatly reduced by centralizing that function or outsourcing it to a bank's lockbox processing facility, where stronger controls can be more affordable.

- To what extent has the entity implemented measures at the process level designed to prevent, deter and detect each of the significant fraud risks identified in its risk assessment? For example, the risk of sales representatives falsifying sales to earn sales commissions can be reduced through effective monitoring by their sales manager, with approval required for sales above a certain threshold.

Score: From 0 (processes not in place) to 10 points (processes fully implemented, tested within the past year and working effectively).

6. *Environment level anti-fraud controls*

- Major frauds usually involve senior members of management who are able to override process-level controls through their high level of authority. Preventing major frauds therefore requires a very strong emphasis on creating a workplace environment that promotes ethical behavior, deters wrongdoing and encourages all employees to communicate any known or suspected wrongdoing to the appropriate person. Senior managers may be unable to perpetrate certain fraud schemes if employees decline to aid and abet them in committing a crime. Although "soft" controls to promote appropriate workplace behavior are more difficult to implement and evaluate than traditional "hard" controls, they appear to be the best defense against fraud involving senior management.

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- To what extent has the entity implemented a process to promote ethical behavior, deter wrongdoing and facilitate two-way communication on difficult issues? Such a process typically includes:
 - Having a senior member of management who is responsible for the entity’s processes to promote ethical behavior, deter wrongdoing and communicate appropriately on difficult issues. In large public companies, this may be a full-time position as ethics officer or compliance officer. In smaller companies, this will be an additional responsibility held by an existing member of management.
 - A code of conduct for employees at all levels, based on the entity’s core values, which gives clear guidance on what behavior and actions are permitted and which ones are prohibited. The code should identify how employees should seek additional advice when faced with uncertain ethical decisions and how they should communicate concerns about known or potential wrongdoing affecting the entity.
 - Training for all personnel upon hiring and regularly thereafter concerning the code of conduct, seeking advice and communicating potential wrongdoing.
 - Communication systems to enable employees to seek advice where necessary prior to making difficult ethical decisions and to express concern about known or potential wrongdoing affecting the entity. Advice systems may include an ethics or compliance telephone help line or e-mail to an ethics or compliance office/officer. The same or similar systems may be used to enable employees (and sometimes vendors,

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<p>customers and others) to communicate concerns about known or potential wrongdoing affecting the entity. Provision should be made to enable such communications to be made anonymously, though strenuous efforts should be made to create an environment in which callers feel sufficiently confident to express their concerns openly. Open communication makes it easier for the entity to resolve the issues raised, but protecting callers from retribution is an important concern.</p> <ul style="list-style-type: none"> – A process for promptly investigating where appropriate and resolving expressions of concern regarding known or potential wrongdoing, then communicating the resolution to those who expressed the concern. The entity should have a plan that sets out what actions will be taken and by whom to investigate and resolve different types of concerns. Some issues will be best addressed by human resources personnel, some by general counsel, some by internal auditors and some may require investigation by fraud specialists. Having a pre-arranged plan will greatly speed and ease the response and will ensure appropriate persons are notified where significant potential issues are involved (e.g., legal counsel, board of directors, audit committee, independent auditors, regulators, etc.) – Monitoring of compliance with the code of conduct and participation in the related training. Monitoring may include requiring at least annual confirmation of compliance and auditing of such confirmations to test their completeness and accuracy. 	<p>RESULTS</p>

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- Regular measurement of the extent to which the entity’s ethics/compliance and fraud prevention goals are being achieved. Such measurement typically includes surveys of a statistically meaningful sample of employees. Surveys of employees’ attitudes towards the entity’s ethics/compliance activities and the extent to which employees believe management acts in accordance with the code of conduct provide invaluable insight into how well those items are functioning.
- Incorporation of ethics/compliance and fraud prevention goals into the performance measures against which managers are evaluated and which are used to determine performance related compensation.

Score: From 0 (process not in place) to 30 points (process fully implemented, tested within the past year and working effectively).

7. Proactive fraud detection

- To what extent has the entity established a process to detect, investigate and resolve potentially significant fraud? Such a process should typically include proactive fraud detection tests that are specifically designed to detect the significant potential frauds identified in the entity’s fraud risk assessment. Other measures can include audit “hooks” embedded in the entity’s transaction processing systems that can flag suspicious transactions for investigation and/or approval prior to completion of processing. Leading edge fraud detection methods include computerized e-mail monitoring (where legally permitted) to identify use

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of certain phrases that might indicate planned or ongoing wrongdoing.

Score: From 0 (process not in place) to 10 points (process fully implemented, tested within the past year and working effectively).

TOTAL SCORE (Out of a possible 100 points):

Interpreting the Entity's Score

A brief fraud prevention checkup provides a broad idea of the entity's performance with respect to fraud prevention. The scoring necessarily involves broad judgments, while more extensive evaluations would have greater measurement data to draw upon. Therefore the important information to take from the checkup is the identification of particular areas for improvement in the entity's fraud prevention processes. The precise numerical score is less important and is only presented to help communicate an overall impression.

The desirable score for an entity of any size is 100 points, since the recommended processes are scalable to the size of the entity. Most entities should expect to fall significantly short of 100 points in an initial fraud prevention checkup. That is not currently considered to be a material weakness in internal controls that represents a reportable condition under securities regulations. However, significant gaps in fraud prevention measures should be closed promptly in order to reduce fraud losses and reduce the risk of future disaster.

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