



Lexington-Fayette Urban County Government
OFFICE OF INTERNAL AUDIT

MANAGEMENT ACTION PLAN PROGRESS REPORT

DATE: May 30, 2014

TO: Jim Gray, Mayor

CC: Sally Hamilton, Chief Administrative Officer
Glenn Brown, Deputy Chief Administrative Officer
Derek Paulsen, Commissioner of Planning, Preservation, & Development
Brad Frazier, Director of Engineering
Phyllis Cooper, Director of Accounting
Susan Straub, Communications Director
Urban County Council Members
Internal Audit Board Members

FROM: Bruce Sahli, CIA, CFE, Director of Internal Audit
Teressa Gipson, CFE, Internal Auditor

RE: Division of Engineering NDS Process Management Action Plan Progress

EXECUTIVE SUMMARY

On January 17, 2013 the Office of Internal Audit issued the Division of Engineering NDS (New Development Section) Review Report. This report was a follow-up Review of an audit of Engineering NDS conducted in 2011. The 2011 Review report contained several repeat findings related to the inspection and documentation procedures used by the NDS on new construction and infrastructure projects. This follow-up Review was conducted to evaluate controls put in place by management to address those specific findings from the January 2013 report.

This review is provided for management information only. It is not an audit and no opinion is given regarding controls or procedures. The period of review included transactions occurring during July 2013 through January 31, 2014.

A summary of each finding and the risk observation from the original January 2013 audit report, and a summary of the results of our follow-up, is provided in the table below. The original findings and risk observation, management's original responses, and details of the results of this follow-up are contained in the ORIGINAL AUDIT RESULTS AND FOLLOW-UP DETAILS section of this report.

Finding or Risk Observation	Summary of Original Finding	Follow-up Results
Finding 1 High Priority	Inspection Documentation Inadequate and Inspection Procedures Not Standardized	Training provided to all inspectors on Public Infrastructure Inspection.
Finding 2 High Priority	Improved Documentation and Oversight of LOC Project Inspections Needed	Improvement noted in documentation and oversight of LOC Project Inspections.
Finding 3 High Priority	Commercial Project Preconstruction Meetings Not Documented	Noted 24 preconstruction conferences completed during review period. Management has revised the Preconstruction Conference form (Attachment 1) to include the criteria which requires a preconstruction meeting.
Finding 4 Moderate Priority	Quality Control Review Inspections Should be Increased	Training and quality control inspection processes put in place by the Division of Engineering appear sufficient to address the finding.

Risk Observation	Project Forfeited Funds Spent in General Fund	The Letter of Credit account balance was correct as verified and monies are removed from the liability account at the point of non-performance and recognized in the Miscellaneous Revenue account.
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ORIGINAL AUDIT RESULTS AND FOLLOW-UP DETAILS

Original Finding #1: Inspection Documentation Inadequate and Inspections Procedures Not Standardized

Priority Rating: High (Repeat Finding from 2011 Review)

Condition:

We reviewed and tested 40 completed NDS inspections in the NDS inspection database during the period from July 2011 through August 2012 and noted inadequate documentation and inconsistent enforcement actions taken by inspectors on non-compliance issues identified in these inspections. For example, NOV's (Notices of Violations) and verbal warnings were given by inspectors to developers/contractors at times for certain violations, such as no cleanout for sanitary sewers, and at other times no action was taken or the action taken was not documented. This was also a finding in the June 17, 2011 audit report.

The Division of Engineering Director's response to the June 2011 report's finding stated, "A training session will be held for the NDS inspectors to specifically address the proper completion of inspection forms and special emphasis will be placed on documenting courses of action". In addition, the former Commissioner of Environmental Quality & Public Works response stated, "Prior to training, the DOE will document the processes to be used (flow chart preferred) and the methods for record keeping and follow-up. All forms will be updated to reflect recent requirement changes, including storm water and sanitary sewer improvements, forestry requirements, current BMP's, etc. Inspectors will be trained on the procedures and forms, will acknowledge (sign off) that they understand the requirement, and will be held accountable for results". The written procedures have not been established and the related training has not been performed.

Effect:

The absence of written procedures for inspection documentation and the processes to consistently address non-compliance issues increases the risk of inadequate and/or inconsistent inspection documentation standards and non-compliance enforcement actions.

Recommendation:

Procedures should be established to require inspectors to document on inspection forms and in the New Development inspection database specific courses of action taken to communicate and resolve non-compliance issues with developers and contractors. Inspection forms and the database should be revised where needed to facilitate this type of documentation. Training should be undertaken to improve inspectors' documentation and to establish parameters and guidelines for when and what specific enforcement actions are required for specific non-compliance issues.

Director of Engineering Response:

A training course will be provided for inspectors on how to document what conclusions were reached on non-compliant issues. This course will provide different field scenarios with an emphasis on documenting communication streams and final actions on noted issues. The date for the training will be forwarded over to the Internal Auditor once it is established.

Commissioner of Planning Response:

I agree with this finding of the audit and believe that the training course recommendation will help to alleviate the conditions found.

Follow-Up Detail Results:

All inspectors have been trained on Public Infrastructure Inspection through several webinars with the American Public Works Association starting on March 6, 2013 and concluding March 27, 2013. Additionally, it was communicated to all inspectors to provide better written explanation of action plans for items needing repair or replacement on the infrastructure inspection form.

The webinars included the Public Infrastructure Inspector Study Guide parts 1, 2, & 3. A sign-in sheet was provided for all three parts. It appears the content covered is an overview of construction inspection topics, some analysis/practical application; and suggested additional self-directed study. Additionally, the following topics were covered:

1. Testing, measurement, and inspection 50%
 - Underground construction 13%
 - At-grade construction 15%
 - Structural construction 5%
 - General construction 17%
2. Project planning and management 25%
3. Project compliance and documentation 25%

Part 2 of the Public Infrastructure Inspector Study Guide refers to managing the project such as documenting the site conditions, work progress and activities occurring on the construction site. Part 3 covers asphalt and concrete specifications and documentation. It appears that the training materials covered the recommended items in the prior finding. Additionally, management sent an e-mail to inspectors in August 2013 reminding inspectors to provide written explanations of action taken for any item that is listed as needing repair or replacement on the infrastructure inspection form. It appears that management has completed their corrective action plan for this finding.

No management response required.

Original Finding #2: Improved Documentation and Oversight of LOC Project Inspections Needed

Priority Rating: High (Repeat Finding from 2011 Review)

Condition:

The previous audit noted that LOC inspection documentation consisted of inspector's handwritten notes and cross-through of completed construction punch list items. We therefore recommended a new form be implemented to more clearly document any changes made to LOC amounts as a result of these inspections. The former Commissioner's management response stated, "Over the course of FY 2011-12 DOE will develop a standard format for the punch list that can be completed for each project and will have clear information regarding the release (or retention) of the bond".

We examined 10 projects wherein LOC amounts were reduced and 9 projects wherein LOC amounts had been released. We found the same procedures and forms used to document LOC inspections as were found in the previous audit with no improvement in the clarity of the documentation. The prior audit also recommended the number of quality control review inspections be increased to perhaps 5% of the total LOC inspections performed. Our examination of quality control review inspections during this review noted that LOC quality

control review inspections are no longer being performed at all. When we asked why these reviews were not being performed, we were told that NDS engineers review and sign off on these inspections and that NDS therefore did not consider it necessary to do these quality control reviews. However, while NDS engineers may be reviewing and discussing the punch list items with the inspectors involved for each of these projects, they are not going into the field and physically inspecting the construction site themselves to determine the quality of the inspection performed by the inspector, as would normally be required for a proper quality control inspection.

Effect:

LOCs represent surety amounts available to the LFUCG to complete or remedy construction projects either abandoned or insufficiently completed by developers and/or contractors, and clear and concise communication of LOC project inspection results are essential to the correct reduction or release of LOCs. Without thorough and proper documentation, the Bonding Officer responsible for adjusting or releasing LOCs for these projects may misinterpret the inspection results and incorrectly reduce or release the LOCs. Additionally, without quality control review inspections of LOC project inspections, inspections deficiencies may not be identified in a timely manner and again LOC amounts may be reduced or released incorrectly as a result. Quality assurance is especially important for these types of inspections because of the significant funds involved with these projects, and the risk exposure to LFUCG if a project is not completed or is abandoned by the contractor and/or developer.

Recommendation:

We again recommend a standard form be created to more clearly indicate construction punch list items and amounts to be reduced or released on projects requiring LOCs. We also recommend NDS resume formal quality control inspection reviews of LOC inspections to increase management's ability to monitor the quality of these reviews. The quality review inspections should occur in a timely manner to ensure they are performed before any LOCs are formally reduced or released.

Director of Engineering Response:

A revised process for performing quality control inspections will be implemented. All sureties currently undergo a quality control review and before any reduction or release can occur, the inspector and supervisor must agree and sign off on the final totals. This often entails field reviews between the inspector, supervisor and in many instances the developer and/or his or her representative. This process will continue for all surety reviews and will also include an additional comprehensive review of a minimum of two (2) surety reductions/reviews per inspector per month. These two additional reviews will be documented on the Quality Control Bonding Inspection Form. A sample is attached (at the end of this report). It should be noted that, in essence, 100% of Surety reviews currently

include a quality control component and with the documentation of two (2) LOC inspections per inspector on the attached form, the overall percentage will be much greater than 5%. Surety components that are not solely under Engineering's purview (such as street trees and sanitary sewer warranty items) will not be included with the two additional monthly quality control reviews. For these surety components, final inspections are performed by the Urban Forester and the Division of Water Quality, respectively, regarding recommendations to reduce or release the surety.

Commissioner of Planning Response:

I agree with the recommendation for this finding and with the above response.

Follow-Up Detail Results:

The written policy has not been changed. However, the current process for performing quality control inspections includes the Bonding Officer pulling the Letters of Credit each month and reviewing with the inspector to determine the current status. It was also noted that inspectors are signing off on their agreement with the LOC reviews. Additionally, we pulled transactions from PeopleSoft of all refunds and it appears that LOC inspections were conducted prior to the release of funds. There were also 42 quality control inspections completed for surety purposes from a total of 217 active sureties. It appears that adequate emphasis is placed on conducting quality control inspections of surety bond projects.

We recommend management update the written policy to reflect the changes noted above.

Director of Engineering Response:

Quality Control Inspections will be performed for Public Infrastructure inspections, and Surety (LOC and Bonds) punch list inspections which are completed by inspectors in the New Development Section of the Division of Engineering. The following methodology will be used to determine the number of quality control inspections that will be performed.

- Quality control inspections for Infrastructure reports will be conducted monthly based on a random draw of two (2) inspections per month per inspector. At the beginning of the month, a random draw will be taken for each inspector's project list before any inspections have been conducted for that month. After the randomly drawn inspection is submitted by the inspector, a quality control inspection will be completed. Only the supervisor will know which projects are to have quality control inspections.

- Surety (LOC and Bond) inspections are performed on a monthly basis with a minimum of 5% of the sureties targeted for a comprehensive review (Quality Control Inspection). A monthly list of upcoming sureties will be provided by the Engineering Bonds Officer to the supervisor for any sureties that are coming due for the following 3 month period. All sureties currently undergo a review and before any reduction or release can occur, the inspector and supervisor must agree and sign off on the final totals. This process will continue for all surety reviews and will also include an additional comprehensive review (Quality Control Inspection) of a minimum of two (2) surety reductions/reviews per inspector per month. The Quality Control Inspections are performed on selected letters of credit/bonds and may require field inspection to verify quantities before a reduction/release is processed. The two additional quality control reviews will be documented on the Quality Control Bonding Inspection Form. Given the current number of sureties, this will typically result in a greater percentage of quality control reviews than the required 5%.
- The supervisor will track inspection forms as they are submitted by the inspector and perform quality control inspections (2 per inspector per month, where applicable). In cases of inclement weather that may make, in the example of infrastructure inspections, the quality control inspection difficult or impossible, the next inspection date for the randomly drawn inspector will be used. This will insure as much as is practical, that the site condition is as near to the condition at the time of the original inspection.
- In cases of major differences in the original inspection and quality control inspection, an on-site meeting will be held with the inspector as soon as possible to go over the findings of the quality control inspection.
- Quality control inspections will be tracked for each inspector and any trends will be noted that may require re-training on certain aspects of the inspection process.

We will update the written policies to reflect these changes.

Commissioner of Planning, Preservation, & Development Response:

I agree with the recommendation for this finding and with the above response.

Original Finding #3: Commercial Project Preconstruction Meetings Not Documented

Priority Rating: High (Repeat Finding from 2011 Review)

Condition:

In response to a finding in our previous audit report that pre-construction meetings were not being consistently documented in the commercial project files as required by the Commercial Development Plan Review Checklist form as shown in the NDS Inspection and Quality Control Procedures and Forms manual, NDS management agreed to adhere to these established Division procedures. The former Commissioner of Environmental Quality & Public Works responded by stating, “The procedure will be adhered to and will be clearly documented in a DOE format. Meeting notes will be stored as an electronic file that can be referred to if questions occur regarding the project’s original scope and the actual work in the field.” However, none of the fifteen commercial project files we examined in our current review contained evidence of pre-construction meeting notes. Pre-construction meetings are required as indicated in the NDS Construction Inspection Manual before a grading permit can be issued.

Effect:

Failure to conduct or otherwise document pre-construction meetings prior to the issuance of grading permits is a violation of Engineering’s procedures and diminishes the effectiveness of the grading permit process.

Recommendation:

The procedure for conducting and documenting pre-construction meetings prior to the issuance of grading permits should be consistently adhered to.

Director of Engineering Response:

Preconstruction meetings for projects are explained in Section 2.2.4 in the Construction Inspection Manual. There it states, “On most infrastructure projects, a pre-construction conference is held among the LFUCG Representative, Engineer, Contractor, Inspector and, when appropriate, utility company representatives.” Many commercial projects can be classified as minor in nature in that they involve minimum land disturbance and private infrastructure construction instead of publicly maintained infrastructure. An example would be a patio addition to a restaurant, a small parking lot expansion, a demolition project, a demolition and rebuild of a restaurant, etc. In many cases, a preconstruction meeting would only prolong permitting the project and result in delays and inefficient use of LFUCG personnel. In order to address this issue, a new guideline was developed that would require documentation of on-site commercial preconstruction meetings for:

- Projects that disturb more than five (5) acres and require Federal/State/Local permits relating to floodplains and streams,
- Projects that disturb more than one (1) acre near a floodplain or stream and include public infrastructure that will be dedicated to the LFUCG, and
- Projects that disturb less than an acre but include public infrastructure or improvements.

Commissioner of Planning Response:

I agree with the recommendation for this finding and with the above response.

Follow-Up Detail Results:

There were 24 preconstruction conferences completed during the review period. Additionally, management has revised the Preconstruction Conference form (see Attachment) to include the criteria which requires a preconstruction meeting. This form will be included in the project case file to assist in determining if a preconstruction meeting is required. It appears that management has effectively completed their corrective action plan for this finding.

No management response required.

Original Finding #4: Quality Control Review Inspections Should be Increased
Priority Rating: Moderate (Repeat Finding from 2011 Review)

Condition:

During the period from July 2011 through July 2012, Engineering NDS management conducted an average of 14 quality control review inspections per month from an average population of 426 total inspections conducted per month (3.3%). In December 2010, Engineering NDS procedures were revised to require two quality control review inspections per month per inspector. As there were six inspectors in Engineering NDS during the period under review, a total of 12 quality control review inspections per month were required under these revised procedures. However, in our previous audit report, we recommended the number of quality control review inspections be increased to perhaps 5% of the total inspections done each month. Management indicated in their response to this prior recommendation they considered two quality control review inspections per inspector per month to be the most manageable given their current level of staffing at the time of the June 2011 response.

Effect:

Quality control review inspections are an essential management tool used to monitor the quality of NDS inspections. An inadequate number of quality control review inspections may result in failure to identify inspection issues in a timely manner. It should also be noted that having a set number of quality control review inspections as opposed to a percentage of the overall population of inspections conducted will result in a decrease of overall coverage should the number of total inspections increase.

Recommendation:

In our opinion, the percentage of quality control review inspections should be increased to 5% of the total average number of monthly inspections to provide reasonable assurance the quality control process includes sufficient field level reviews.

Director of Engineering Response:

Based on current staffing within the NDS, the frequency of quality control inspections will need to remain at its current level. However, the Division of Engineering does not object to proposing additional staff within the FY 2014 budget in order to increase the number of quality control inspections as recommended by the Internal Auditor. This funding would be subject to the FY 2014 budget parameters set by the Department of Finance for proposed staff increases.

Commissioner of Planning Response:

I agree with the response for this finding.

AUDITOR'S NOTE: The Office of Internal Audit makes no recommendation regarding the addition of additional staff. The request for additional staff is a management prerogative. Our position is limited to that which is stated in our audit recommendation.

Follow-Up Detail Results:

Additional staff was proposed for the FY 2014 budget by management but was not approved. The audit did not recommend the addition of staff. This was management's response in resolving the finding.

There were a total of 2,184 residential inspections and 540 commercial inspections performed during the audit period. Some commercial projects involve surety to provide for the possibility that LFUCG might have to complete or repair commercial project infrastructure such as sewer lines and roads, and as noted in Finding #2 there were 42 quality control inspections conducted from a total of 217 (19%) commercial properties with active sureties. In addition, 32 of the 2,184 (1.5%) residential inspections performed during the audit period received on-site quality control

reviews by management. These quality control inspections, coupled with the training program noted in the Follow-Up Details for Finding #1 and the additional inspection steps described in management's response to Finding #2, appear sufficient to address the concerns noted in previous finding.

No management response required.

RISK OBSERVATION

Standards for the professional practice of internal audit stipulate that it is the Office of Internal Audit's responsibility to inform management of areas where risk to the organization or those it serves exist. The following observation identifies a risk associated with future funding of forfeited Letter of Credit projects that has been addressed by management and does not represent a violation of statutes or policies, but that is considered to be of sufficient importance to deserve mention in this report to ensure senior management's awareness.

Original Risk Observation-Project Forfeited Funds Spent in General Fund

The NDS commonly uses Letters of Credit as a form of bonding to ensure all new bondable development work is completed. A Letter of Credit is a document issued by a bank that essentially acts as an irrevocable guarantee of payment to the LFUCG if a developer does not perform their obligations. Checks are sometimes received from developers in lieu of Letters of Credit. In the event a developer does not perform their obligations, the Letter of Credit or check amount is secured by LFUCG to provide funding for the future completion of the developer's forfeited obligation.

The Division of Engineering only seeks to access the forfeited funds when work on the forfeited projects is performed, which in some cases may not occur for several years. The Division of Engineering discovered in the past few months that forfeited funds which had been recorded in Miscellaneous Revenue are no longer available for their intended use. This is due to the fact that the Division of Accounting sweeps Miscellaneous Revenue at fiscal year end, thereby making all Miscellaneous Revenue (which included forfeited funds) available for General Fund use. According to Division of Engineering records, the amount of forfeited funds that have been swept from Miscellaneous Revenue and made available for other General Fund purposes since 2005 totaled \$360,683, of which \$158,824 was being held for future development or future capital projects, \$148,255 was being held for remaining streets and roads work, \$49,128 was being held for sanitary sewer work, and \$4,476 was funds left over from forfeited projects the LFUCG had subsequently completed. When the

Division of Engineering identified this problem, the Division of Accounting developed an alternative accounting method that encumbers future forfeited funds.

Director of Accounting Response:

This issue has been resolved. A procedure has been put in place whereby the Division of Engineering will only move funds out of the Letter of Credit Liability account as each project incurs the expenditures. Therefore, the revenue recognized will match the incurred expenditures on the projects.

Acting Commissioner of Finance & Administration Response:

I concur with the new procedure.

Follow-Up Detail Results:

We confirmed the Letter of Credit account balance and verified that the forfeited funds account did not contain any funds, since monies are correctly moved at the point of non-performance and recognized in the Miscellaneous Revenue account. It appears that management has completed their corrective action plan for this finding.

No management response required.

COMMERCIAL DEVELOPMENT PLAN REVIEW CHECKLIST

PROJECT NAME/ADDRESS _____

BASIC INFORMATION

COMMENTS

___ All Plan Sheets Stamped by P.E. Full / PDF / N/A
 ___ Executive Summary New Development Redevelopment
 ___ Development Plan DP# _____ DATE: N/A
 ___ Compliance Statement Public / Private / N/A
 ___ Development Agreement _____

FOR LAND DISTURBANCE PERMIT

___ ESC Inspection (By LFUCG) _____
 ___ Erosion Control Plan _____
 ___ Grading Plan _____
 ___ Land Disturbance Permit list _____
 ___ Urban Forester Approval _____
 ___ Notice of Intent (NOI) KYR _____
 ___ Coverage Date _____
 ___ Stormwater list (By LFUCG) _____
 ___ Letter from adjoining property _____
 ___ Pre-Construction Meeting Date Held N/A
 ___ State/Federal Permits _____
 ___ Other _____

Preconstruction Meeting Criteria

- Project disturbs more than five (5) acres of land and requires Federal/State/Local permit(s) relating to floodplains and streams.
- Project disturbs more than one (1) acre of land near a floodplain or stream and include public infrastructure that will be dedicated to the LFUCG.
- Project disturbs less than an acre of land but includes construction of public infrastructure or improvements.
- Property owner requests preconstruction meeting where criteria above is not met and the meeting is not required per Engineering policy.
- Pre construction meeting not required based on the above criteria.

FOR BUILDING PERMIT

___ Sanitary Sewer Plan _____
 ___ Grease Trap _____ FOG to DWQ _____
 ___ Water Quality Measures _____
 ___ Commercial Maintenance Agreement _____
 ___ Drainage Plan _____
 ___ Drainage Calculations _____ Pipe Sizing _____
 ___ Roadway Plan _____
 ___ DOT Encroachment Permit _____
 ___ Entrance Deposit _____
 ___ ESC Inspection (By LFUCG) _____
 ___ Sanitary Sewer Tap Fee _____
 ___ OPSS Fee _____
 ___ Other _____

GENERAL INFORMATION

Plans submitted _____
 Plans reviewed _____
 Designer notified _____
 Plans accepted _____
 Project Closed/Archived _____