



King County

Metropolitan King County Council

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MANAGEMENT LETTER

DATE: July 8, 2008

TO: Metropolitan King County Councilmembers

FROM: Cheryle A. Broom, ^{CB} County Auditor

SUBJECT: Follow-up Review of 2005 and 2006 Brightwater Project Performance Audits

The purpose of this Brightwater Project follow-up review is to document the county's progress in implementing the 2005 and 2006 Brightwater Project performance audit recommendations for improving the Wastewater Treatment Division's (WTD) procurement and contracting practices (see Attachment A for list of the 2005 and 2006 recommendations and summary status of recommendations, and Attachment B for more complete discussion). In addition to updating the implementation status of the recommendations, we also discuss ongoing implementation and monitoring efforts to ensure that the desired improvements are realized.

Audit Implementation Progress and Planned Activities

During 2005 and 2006, the auditor's office published two performance audits evaluating WTD's procurement and contracting practices processes for the \$1.802 billion Brightwater Project. The first audit focused on procurement practices for professional design engineering services for the Brightwater conveyance system. The second audit evaluated WTD's management of the contracting practices for professional design engineering services for the Brightwater treatment plant. Given the magnitude of the Brightwater Project and the numerous factors influencing the treatment plant and conveyance system design services, we found opportunities to improve the efficiency and cost effectiveness of WTD's capital project procurement and contracting practices.

We also identified opportunities to strengthen countywide capital project procurement and contracting policies during the 2005 and 2006 audits based on best practices in capital project management. The County Executive concurred or partially concurred with the recommendations, and the Finance and Business Operations Division (FBOD)

and the Procurement and Contracting Services Section (PCSS), which are responsible for the development and monitoring of the countywide capital project policies and procedures, assumed responsibility for following through on numerous recommendations contained in both Brightwater Project audits.

Two other noteworthy events transpired related to effective oversight of county capital projects during the past two years. First, the County Council established a capital project oversight (CPO) function in the King County Auditor's Office for major capital projects. (The County Council designated the Brightwater Project as one of four major capital projects subject to more extensive legislative oversight.) Second, the County Executive recently retained a new capital project analyst in the Office of Management and Budget to work with the county implementing agencies and our office's Capital Project Oversight team to develop initial strategies to implement certain elements of the CPO model.

Conclusions

Based on our follow-up review, we concluded that the county made substantial progress in implementing some audit recommendations. The attached matrix provides the current status for each of the Brightwater Project 2005 and 2006 audit recommendations as well as auditor's office comments. Briefly, the noteworthy accomplishments include FBOD's reconvening the Interdepartmental Forum and establishing the KC (King County)-ACEC (American Council of Engineering Companies) Executive Committee comprised of county agency and local civil engineering consulting firm representatives that have served as important partners in improving countywide capital policies and processes.¹ The Interdepartmental Forum and KC-ACEC Executive Committee addressed longstanding compensation, procurement, scheduling, and other procedural issues that impact the successful delivery of capital projects.

Despite the development of multiple draft county capital policy and procedures revisions, none of the proposed draft revisions had been submitted to the Executive Audit Committee. The Executive Audit Committee's approval is an important step in the formal adoption of any new policy revisions by the County Executive. It is our understanding that the executive implementing agencies were unable to reach a consensus on the proposed revisions. However, on July 7, 2008 (yesterday), we received notification that the executive implementing agencies reached consensus on the proposed policy revisions, and formally transmitted the revisions to the Executive Audit Committee for review. Attached is a copy of the transmittal memorandum, and copies of the proposed policy revisions are on file in the Auditor's Office.

¹A KC-ACEC Liaison Committee was initially formed in January 2003 to address issues related to the efficiency, effectiveness, and equity of countywide capital procurement and contracting practices.

Consistent with the Brightwater Project initial audit recommendations, we respectfully recommend that Executive Audit Committee and County Executive give favorable consideration to the proposed policy revisions, and that FBOD, PCSS, WTD and the other county implementing agencies give priority to implementing the policy revisions, related to delegation of authority, thresholds for centralized Project Control Officer reviews, design-to-target (budget) contract provisions, and formal reviews of consultant cost proposals to further strengthen countywide procurement and contracting policies and the cost effectiveness of capital projects.

Tina Rogers and Susan Baugh will review the policies that are ultimately adopted by the County Executive, and continue to monitor the efforts underway in 2008 to achieve effective implementation of the audit recommendations. Please contact Susan at 296-0376 or me at 296-1655 if you have any questions.

CB:SB:yr

- Attachments: A. Summary of the Implementation Status of the Brightwater Project Audits Recommendations
B. Implementation Status of the Brightwater Project Audits (2005 and 2006) Recommendations
C. Memorandum RE: Request for Review and Approval of Proposed Changes to Construction Management Policies and Procedures

cc: Ken Guy, Division Director, Finance and Business Operations Division (FBOD)
Christie True, Division Director, Wastewater Treatment Division, DNRP
Executive Audit Committee Members
David Leach, Manager, Procurement & Contract Services Section, FBOD
Nora Huey, Supervisor, Professional and Construction Services Section, FBOD
Wendy Keller, Project Control Officer, Professional and Construction Services Section, FBOD
Dave Lawson, Manager, Executive Audit Services
Tina Rogers, Capital Projects Oversight Manager, County Auditor's Office
Mark Melroy, Senior Legislative Analysts/Lead, Council Capital Budget Committee

Attachment A
Summary of the Implementation Status of the
Brightwater Project Audit Recommendations

<i>Recommendations</i>	<i>Fully Implemented</i>	<i>Partially Implemented</i>	<i>Work in Progress</i>
<u>2005 Brightwater Project Audit Recommendation 1:</u> Periodically assess reasonableness of compensation for professional engineering services.	X		
<u>2005 Brightwater Project Audit Recommendation 2:</u> Refine procurement process schedule template and establish performance standards for timely procurement processes.		X	
<u>2005 Brightwater Project Audit Recommendation 3:</u> Collaboratively establish project-specific procurement schedules.		X	
<u>2005 Brightwater Project Audit Recommendation 4:</u> Achieve compliance with procurement schedules and justify delays.			X
<u>2005 Brightwater Project Audit Recommendation 5:</u> Ensure project managers adhere to key steps in procurement process (e.g., reviews and approvals).	X		
<u>2005 Brightwater Project Audit Recommendation 6:</u> Develop advisory forum to address capital project contracting issues and assess best practices.	X		
<u>2006 Brightwater Project Audit Recommendation 1:</u> Adhere to all policies and procedures for managing capital project contract amendments. Identify contract changes by project task.	X		
<u>2006 Brightwater Project Audit Recommendation 2:</u> Submit amendments over \$150,000 to FBOD Project Control Officer for review.		X	

**Attachment A
Summary of the Implementation Status of the
Brightwater Project Audit Recommendations**

<i>Recommendations</i>	<i>Fully Implemented</i>	<i>Partially Implemented</i>	<i>Work in Progress</i>
<u>2006 Brightwater Project Audit Recommendation 3:</u> Execute amendments prior to proceeding on work; review delegation of authority provisions, including approval thresholds.		X	
<u>2006 Brightwater Project Audit Recommendation 4:</u> Clarify current policy related to PCO review; assess thresholds for reasonableness.		X	
<u>2006 Brightwater Project Audit Recommendation 5:</u> Include design to budget and stop work provisions in future professional services contracts.		X	
<u>2006 Brightwater Project Audit Recommendation 6:</u> Clarify consultant roles; overlap in project responsibilities.	X		
<u>2006 Brightwater Project Audit Recommendation 7:</u> Develop guidelines and lessons learned for the use of General Contractor/Construction Manager delivery methods.			Not Applicable At This Time
Total 2005/2006 Recommendations	5	6	1

Attachment B—Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1 – Recommendation 1:</u> Periodically assess reasonableness of compensation for design engineering services based on national salary surveys and best practices.</p>	<p><u>Concur</u></p>	<p>The county is currently compensating engineering firms at a fair and reasonable market rate based on the detailed salary survey comparison conducted for Brightwater Procurement audit. The Executive agrees that periodic reviews are necessary to review market conditions and the reasonableness of compensation practices. The Procurement and Contract Services Section (PCSS) plans to hire an auditing firm in 2006 to review compensation and annual salary escalation factors for design engineering services.</p> <p>Comments: The Executive agrees with the Auditor's statement that "any increases in compensation should continue to be considered in relation to the county's interest in cost-effective capital project delivery and the Federal Acquisition Regulations' guiding principles to achieve best value."</p>	<p>Completed. The county presented its recommendations regarding the maximum direct salary rate (salary cap) and contract escalation rates to ACEC on June 24, 2007.</p> <p>The county's rates will be updated annually (in June) using new methodologies developed by an independent consultant.</p> <ul style="list-style-type: none"> • Salary Cap: Although the ACEC remains firm in the belief that a maximum rate should not be necessary, they have acknowledged the new methodology for establishing the maximum direct salary rate is an acceptable compromise. The methodology is based on the Bureau of Labor Statistics Annual Salary Survey, senior level engineer (ASCE code 9), using the 75 percentile to retain top expertise on county projects. 	<p>The county successfully implemented this recommendation by retaining Mobius Industries USA, LLC, a financial management firm, to perform market research and conduct a compensation survey for professional engineering services. Consistent with the consultant's data and recommendations, the county adopted new methodologies to determine the annual adjustments for the maximum direct labor rate (salary cap) and for contract escalation rates. The potential cost of the adjustments will range between \$726,000 and \$1.5 million annually based on the number of contracts and senior level consultants.</p> <p>The county adjustments include a direct salary cap increase for senior engineers from \$65 to \$69 (6 percent) based on the Bureau of Labor Statistics Annual Salary Survey National Compensation Survey (75th percentile). Although the county plans to review the cap annually, future compensation increases or decreases for senior engineers will only be considered when the county adjusts the overall cap, and when direct salaries for senior engineers are established for new contracts.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p>BW1 – Recommendation 1 (continued):</p>	<p>Concur</p>		<ul style="list-style-type: none"> Escalation Rates: ACEC did not support the new escalation methodology that uses a weighted average for engineering salaries and a multi-year leveling mechanism to smooth out high and low labor market periods. The methodology also includes a minimum floor rate (the regional CPI) and a maximum ceiling rate (the federal government's cap rate for A/E contracts). The rate is established for the contract phase (typically a two-year period), and is revisited for any new phase. <p>Application of the new methodologies becomes effective on contracts where proposals are received after July 1, 2007. Application of the new salary cap and escalation rates may be effective on some existing contracts if those contracts included contract terms that allowed for an adjustment.</p>	<p>The county also adopted the independent consultant's proposed methodology for adjusting the escalation rates for multi-phase contracts. Based on a five-year rolling average rate to level out the impact of market swings, the county will adjust the escalation rate annually. In 2007, the floor rate was derived from the regional CPI, and a ceiling rate of 4 percent was derived from the current Compound Annual Growth Rate (CAGR) which is used as a cap by the Federal government.</p> <p>Although the adjusted rates are on the high side of average due to local area market conditions in 2007, the new rates provide assurance that local firms will be able to attract highly skilled engineering professionals. At the same time, the onus is on the county to monitor salary trends closely to ensure that future annual compensation and escalation rate increases and decreases continue to be reasonable for all parties.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council-Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1 – Recommendation 2:</u> Continue to refine procurement process schedule template and establish performance standards for timely procurement processes.</p>	<p><u>Concur</u></p>	<p>PCSS has already established general timeframes for various types of projects depending on their complexity. The general timeframes will be modified, as needed, on specific projects based on consultations with county project managers.</p> <p>In the second half of 2005, PCSS and implementing agencies will convene an interdepartmental forum to discuss current practices and performance standards. The forum will be used to clarify mutual expectations and establish an action plan relating to this recommendation.</p>	<p>Partially Completed. The Interdepartmental Forum assigned a Schedule Performance Measurement Subcommittee (i.e., Scheduling Subcommittee) to develop the establishment of project-specific schedules and then measure performance against these project-specific schedules.</p> <p>The Scheduling Subcommittee has initially focused its attention on A/E design and professional service contracts and will soon begin work on the scheduling of construction contracts:</p> <ul style="list-style-type: none"> • <u>A/E Design and Professional Services:</u> The guidelines and schedule tracking process for A/E contract procurements have been developed; a database to track schedule progress was developed; training for project managers on developing project specific schedules is underway; and individual schedule development and tracking is underway for all new A/E and professional service procurements. 	<p>PCSS has effectively implemented this recommendation for professional services contracts in collaboration with the county implementing agencies. Procurement templates and project-specific schedules were developed for small, medium, and large A/E contracts. PCSS is now collecting data from new contract procurements to measure actual performance; refine the initial time guidelines; and ultimately create performance standards to further promote timely procurement and contracting processes.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1 – Recommendation 2</u> (continued):</p>			<ul style="list-style-type: none"> Construction: The Scheduling Subcommittee will soon begin to establish similar guidelines for construction procurements with the goal of being completed by mid-2008. 	<p>PCSS has partially completed the templates and time guidelines for construction contract procurements at this time. Implementation of the template and time guidelines is expected in June or July of 2008.</p>
<p><u>BW1 – Recommendation 3:</u> Collaboratively establish project-specific procurement schedules.</p>	<p><u>Concur</u></p>	<p>Same response as in #2 above. In addition, PCSS works with county project managers to develop realistic procurement schedules which are identified in RFP's. PCSS and agencies will commit to these schedules and monitor progress accordingly.</p> <p>Comments: As noted in the audit, the design of the Brightwater conveyance system was rather complex and unusual given the magnitude of the scope of work, the large number of subconsultants, the formation of a joint venture as the prime consultant, and various cost analysis issues. The experience gained from Brightwater will serve as a guide for setting practical procurement schedules in the future.</p>	<p><u>Partially Completed.</u> For the A/E design and professional services contracts, the Scheduling Subcommittee of the Interdepartmental Forum completed development of procurement schedule guidelines, tools, and tracking mechanisms enabling production of project-specific and realistic procurement schedules.</p> <p>The remaining work will focus on project-specific schedules for construction contracts.</p> <p>See comments above for BW1, Recommendation 2.</p>	<p>PCSS and the county implementing agencies have worked collaboratively during the past two years to establish project-specific procurement schedules as noted above.</p>

Attachment B — Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1 – Recommendation 4:</u> Achieve compliance with procurement schedules with delays justified on the basis of significant or unique circumstances.</p>	<p><u>Concur</u></p>	<p>PCSS continues to work collaboratively with county agencies to establish and meet critical milestones on capital procurement processes. The interdepartmental forum (see #2 above) will discuss scheduling benchmarks and how to measure and evaluate delays on specific projects.</p> <p>Comments: In January 2005, an important new agreement to expedite the resolution of procurement issues was established by PCSS, the Wastewater Treatment Division and the Transit Department. The agreement, commonly known as the "deviation process," allows county project managers to elevate procurement issues/disputes to appropriate levels of management with the goal of resolving issues in a timely manner. PCSS has initiated training with county project managers regarding the new deviation process and will monitor its use in 2005 and 2006.</p>	<p>Partially Completed. Based upon the guidelines and database tracking mechanism developed for the A/E design and professional services contracts, the county will be able to track progress on project-specific procurement schedules and identify (if any) consistent impediments which could be addressed in the future.</p> <p>The remaining work will focus on project-specific schedules for construction contracts.</p>	<p>The auditor's office will continue monitoring the implementation of this recommendation. PCSS and the implementing agencies do not yet have sufficient data to identify and address recurring impediments to schedule performance.</p> <p>Depending upon the frequency and nature of the implementing agencies' use of the deviation process, the auditor's office may assess its reasonableness (e.g., determine whether the process is still needed and/or effective in resolving procurement issues) in our year end monitoring report.</p>

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Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1</u> – Recommendation 5: Ensure that project managers adhere to and document all key steps in the procurement process.</p>	<p><u>Concur</u></p>	<p>PCSS will continue to offer periodic training to project managers and disseminate helpful compliance tools such as the "procurement process checklist." The interdepartmental forum (see #2 above) will review the extent to which agencies are using compliance tools and recommend improvements or updates.</p>	<p>Completed. PCSS, in conjunction with the implementing agencies, will continue to provide training classes on the new terms and conditions (T&C). Training on the new procurement schedule and tracking process is almost complete with one final session held in September. Upcoming training will include changes on the contract terms and conditions, and review of the Project Control Officer function and compliance tools. Development of new terms and conditions training materials will be started in September 2007 and is ongoing.</p>	<p>The auditor's office will confirm whether this recommendation is fully implemented when sufficient information is collected in the procurement schedule database to determine whether project managers are generally adhering to key process steps. Sufficient schedule data and process documentation may not be available until 2009 due to the low volume of contract activity in 2008. During the interim period, however, PCSS developed effective training materials and initiated hands-on training to promote understanding of and compliance with newly revised contract terms and conditions.</p>

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Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW1 – Recommendation 6:</u> Develop an advisory forum to address issues, develop performance standards, and assess the merits of emerging best practices.</p>	<p><u>Concur</u></p>	<p>In recent meetings with the design engineering consulting community, the county has proposed to establish an ongoing "advisory committee" which would include representatives of the consulting community along with senior county management, including department and division directors or deputy directors. The advisory committee is designed to achieve improvements to the contracting process consistent with the best practices. The advisory committee will be established in the second half of 2005.</p> <p>Recent discussions with the consulting community have resulted in a draft set of "contracting principles." The contracting principles will be examined in conjunction with the best management practices identified in the audit, all of which the county is already implementing to some degree. After the contracting principles document is agreed upon, it will guide future activities of the advisory committee.</p>	<p>Completed. In late 2005, representatives from the county and the ACEC agreed on a new team charter for the KC-ACEC Executive Committee. The mission of this committee is to sustain a spirit of collaboration between the consulting engineering community and county government that leads to best practices and high quality, cost effective, and timely public projects. The Executive Committee meets at least four times each year and sub-committees are formed as needed. The major focus of attention in 2006 and 2007 was the review of the new A/E boilerplate contract.</p> <p>Soon after the KC-ACEC Executive Committee was formed, the county formed an internal team called the Interdepartmental Forum. The forum includes representatives from Finance, the Executive's Internal Auditor, and departments with major capital project responsibilities. The forum fosters a spirit of open communication and focuses on best practices, policies, and guidelines associated with the procurement and project delivery processes for design and construction contracts.</p>	<p>The county has fully implemented this recommendation. FBOD reconvened the Interdepartmental Forum, represented by PCSS and all county agencies responsible for implementing capital projects. In addition, the FBOD instituted a KC-ACEC Executive Committee comprised by local engineering firms, PCSS, and the implementing agencies.</p> <p>The KC-ACEC Executive Committee has met quarterly since December 2005. The committee made substantial progress on its top 10 procurement and contracting issues, including the efficiency and equity issues identified in the 2005 Brightwater audit. A KC-ACEC Contracts Subcommittee was also formed in 2006 and met regularly to address related contract terms and conditions on behalf of the larger work groups.</p> <p>The Interdepartmental Forum generally met on a monthly basis during the past two years to address ACEC proposed procurement and contract revisions, and to consider other countywide capital contracting policy issues.</p>

Attachment B — Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p>BW1 – Recommendation 6 (continued):</p>			<p>The forum continues to meet regularly to discuss ACEC issues, terms and conditions, and potential changes to policies and procedures. Subcommittees are formed as needed to address specific topics.</p>	<p>The two committees and contract subcommittee have tackled a number of substantive issues and proposed new capital procurement and contracting practices on behalf of the county. These practices include implementing a new Project Approach Chart to streamline ACEC requirements and facilitate county reviews of A/E consultant proposals; providing input on procurement templates and schedules; and suggesting practical modifications to standard contract terms and conditions (e.g., transferring funds between contract tasks) to improve the efficient capital project delivery.</p> <p>However, FBOD, PCSS, and the Interdepartmental Forum have not yet reached a consensus on suggested countywide policy revisions. We recommend that the proposed revisions to the capital policy and procedure be given priority in 2008.</p>

Attachment B — Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 1:</u> WTD project management should adhere to all county policies and procedures for managing capital project contract amendments, particularly requirements to document independent cost estimates or critical reviews for additional or revised design work and develop detailed records of negotiations. Design changes should be identified by project tasks along with cost and schedule impacts.</p>	<p><u>Concur</u> The Wastewater Treatment Division (WTD) has initiated changes to improve the project file documentation. The Executive will assess the existing county policies and management controls and propose refinements that are reasonable and appropriate to meet the needs of unique large-scale projects.</p>	<p>The Interdepartmental Forum on Procurement will draft appropriate revisions to county policies and procedures by the second quarter 2007.</p>	<p><u>Completed.</u> A draft policy revision offering an alternate to the independent cost estimates was reviewed and approved by the forum. This alternative will be presented to the Executive Audit Committee with approval expected by the end of 2007. A change to current contract terms and conditions which allows "transfer of funds between tasks" was reached. All transfers must be documented using the county's standard contract crosswalk tool. The crosswalk clearly depicts fund moves and includes rationale. This change was reflected in the new terms and conditions effective August 1, 2007.</p>	<p>Although draft policy revisions were developed to authorize critical reviews in lieu of independent cost estimates of consultant proposals, the draft has not yet been submitted to the Executive Audit Committee for approval. We again recommend that FBOD and PCSS, which are responsible for countywide procurement and contracting policies, give priority to clarifying this important cost control assurance requirement in 2008. One noteworthy design change practice implemented during 2007 by WTD and other county implementing agencies was consistent tracking of design changes and related fund transfers by tasks along with costs and schedule impacts. This new practice facilitates management and project control reviews of the status of capital project budgets and schedules.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 2:</u> WTD project management should submit amendments with cost estimates that exceed \$150,000 to the central Project Control Officer (PCO) for review and recommendations. Amendments with costs that individually or cumulatively exceed 10 percent of the original design contract value should be submitted to the department director for review and approval.</p>	<p><u>Partially concur</u> The Executive branch will initiate a review and clarification of threshold requirements for county contracts. WTD will submit all applicable amendments over \$150,000 for PCO review pending a formal review and clarification of the threshold in Executive policy and procedures.</p>	<p>Review and clarify threshold for review of contract amendments by fourth quarter 2007 as part of the work program for the Interdepartmental Forum on Procurement. Implemented. Comments: The audit revealed that WTD had different interpretations of the policy with regard to the \$150,000 threshold for amendment reviews by the Finance Division's central PCO.</p>	<p>Partially Completed. Several concept drafts clarifying the PCO review and threshold have been presented to the responsible subcommittee. Work on this policy area was shifted to resume later this fall in order to prioritize work on finalizing the escalation rate, maximum salary rate methodologies, and revising the consultant contract T&C's. The assigned subcommittee's schedule for upcoming work has just been reset. It is expected the PCO policy revision discussions will resume in October 2007.</p>	<p>Although draft policy revisions were developed to clarify the requirement for the central Project Control Officer's review of cost estimates for amendments that exceed \$150,000, none of the draft revisions were submitted to the Executive Audit Committee for approval. We again recommend that FBOD and PCSS, which are responsible for countywide procurement and contracting policies, give priority to clarifying this important internal oversight requirement in 2008.</p>
<p><u>BW2 - Recommendation 2 (continued):</u></p>	<p>The Executive branch believes WTD met the obligation for informing the department director of significant cost changes; however, the Executive agrees that documents related to such processes could be improved and associated procedures clarified. WTD has already initiated draft forms and is currently preparing associated procedures revisions.</p>		<p>All draft policy revisions are worked through a subcommittee process to establish recommendations to the forum.</p>	<p>(See related auditor's comments above.)</p>

Attachment B — Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 3:</u> The Department of Natural Resources and Parks and WTD management should ensure that new or revised design work does not proceed without fully executed and authorized contract amendments, consistent with county and WTD requirements.</p> <p>Contracts should not be amended to include work that is outside the original contract in scope and contract budget in advance of securing additional budget or appropriation authority.</p>	<p><u>Concur</u></p>	<p><u>Implemented.</u> Follow-up work on the "delegation of authority" topic will be addressed as part of Recommendation 4.</p> <p>WTD recognizes that work has been authorized to proceed without a fully executed amendment, but has not done any work without securing additional budget or appropriation authority.</p>	<p><u>Partially Completed.</u> Several concept policy revision drafts related to delegation of authority have been presented.</p> <p>Some departments had difficulty with the concept drafts as they believe authority within departments for such delegation currently exists and does not require new or revised policy.</p> <p>The assigned subcommittee will be seeking refined direction from the Interdepartmental Forum at its next meeting in September 2007.</p>	<p>Although draft policy revisions were developed to clarify the requirements to ensure that design changes and associated contract amendments are properly reviewed and approved. None of the drafts have been submitted to the Executive Audit Committee for approval, however, due to the absence of a consensus by the implementing agencies.</p> <p>We again recommend that FBOD and PCSS give this important oversight requirement priority in 2008 to ensure that project costs and schedules changes are subject to thorough management reviews.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 4:</u></p> <p>The Procurement and Contract Services Section, in cooperation with the Department of Natural Resources and Parks and WTD management, should assess current county policies in relation to unique large-scale capital projects to ensure their reasonableness and to promote consistent compliance by county agencies. Particular attention should be given to adequate delegation of approval authority to ensure critical project schedules can be met while maintaining public accountability.</p> <p>County policies related to central project control officer review of contract amendments greater than \$150,000 should also be clarified to avoid confusion among implementing agencies.</p>	<p><u>Concur</u></p> <p>The Executive branch will direct the departments of Finance and Natural Resources and Parks to collaborate on the development of a "delegation of authority" proposal that will address critical project schedules while remaining consistent with best business practices</p>	<p>The Interdepartmental Forum on Procurement will draft revisions to county policies and procedures by first quarter 2007, with focus on the delegation of approval authority.</p> <p>The clarification of existing county policies for contract amendments greater than \$150,000 will take place as part of responding to Recommendation 2 above.</p>	<p>See status updates under BW 2- recommendations 2 & 3 above.</p>	<p>Although draft policy revisions were developed to clarify the delegation of authority and PCO review provisions in the countywide capital project polices, the drafts were not submitted to the Executive Audit Committee since an existing policy allows the Department Directors of implementing agencies to established internal delegation of authority thresholds. For example, WTD developed a delegation of authority policy that authorizes the WTD Brightwater Project Section Manger and the WTD Division Director to approve change orders up to \$1 million and in excess of \$1 million, respectively. However, the existing delegation of authority policy does not clearly address the PCO Officer's role in reviewing change orders in excess of \$150,000 that have been approved at the project manager level.</p> <p>We again recommend that FBOD and PCSS give delegation of authority and PCO review thresholds due consideration to ensure consistency with the intent of the original recommendation (e.g., changes in project costs and schedules are subject to thorough management reviews without constraining project progress).</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 5:</u> WTD, in collaboration with the Procurement and Contract Services Section, should ensure that design to construction budget and stop work provisions are included in future professional engineering services contracts to avoid unnecessary design costs.</p>	<p><u>Partially concur</u> "Design to construction budget" and "stop work provisions" are contracting management options that should be considered in the development of professional engineering services contracts. The Executive will direct the Interdepartmental Forum on Procurement to assess current guidelines and prepare new contract language and guidelines for the most effective contract management provisions, including "design to construction budget" and "stop work provisions". The new guidelines will address how the provisions should be applied to various types of contracts and projects.</p>	<p>The Interdepartmental Forum on Procurement will draft new contract clauses for countywide use along with guidelines by second quarter 2007. Comments: The intent of directing designers to design to a construction budget is worthwhile but may not be practical because the drivers for cost increases may be outside the control of the designer. Designers would not be willing to work for any owner if they were expected to pay for costs for items that are outside their control. We suggest some wording changes here to reflect that budgets are based on certain assumptions and scopes of work and the amendment or change order process is the mechanism for addressing cost increases that could not be anticipated in a preliminary budget estimate. The statement, as written, is true for any type of construction contract, i.e., there are always factors that arise outside the control of the designer and a contract should have language that addresses these situations.</p>	<p><u>Partially Completed.</u> The Interdepartmental Forum's Contracts subcommittee met regularly to discuss the "design to construction budget" issue. Rather than address this topic as part of the contract terms and conditions, the forum directed the subcommittee to investigate and draft language which could address this issue through the contracted scope of work. This approach retains flexibility depending on the uncertainties associated with the scope of the project. The scope drafting is underway; with discussions and subcommittee review expected to start October and November, 2007. The plan is to forward a consensus scope draft to the forum later this fall for consideration.</p>	<p>This recommendation has been the subject of careful review by the FBOD, PCSS, and the Interdepartmental Forum. The executive correctly notes that project owners may often be the drivers of design changes that result in cost increases that are beyond the consultant's or contractor's control. At the same time, it is reasonable for owners to institute contract provisions such as design to budget/target and stop work provisions. These provisions would help ensure that county projects are delivered within the original project budget. We again recommend that FBOD, PCSS, and the forum consider developing a countywide design to construction budget/target and stop work provisions that allow implementing agencies flexibility in designing and constructing complex projects with a high degree of uncertainty while holding consultants and contractors responsible for cost performance. These contract provisions will also be consistent with the proposed legislative review requirements no later than the 30 percent design threshold.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 6:</u> WTD should ensure that the Phase IV construction engineering services contract and the GC/CM construction contracts contain distinct and clearly defined roles and responsibilities and do not overlap with the role and responsibilities of CDM. The contracts should also address important communication issues, including dispute resolution issues, to ensure continued collaboration in achieving the Brightwater Project quality, cost, and schedule objectives.</p>	<p><u>Concur</u> In response to a similar recommendation from the council's Oversight Management Consultant, R. W. Beck, in June 2005, WTD has developed a clear matrix of responsibilities and communication protocols for all contracts on the Brightwater Project.</p>	<p><u>Complete.</u></p>		<p>WTD successfully implemented this recommendation, and ongoing monitoring of all the Brightwater Project contracts is now provided by the Council's Oversight Management Consultant (Beck) and the Brightwater Project Oversight Work Group. The work group, which meets monthly, includes council, executive, and auditor's office representation.</p>

Attachment B —Implementation Status of the Brightwater Project Audits (2005 & 2006) Recommendations

Council Auditor Recommendation	Executive Response	Schedule for Implementation	FBOD/PCSS Status Update	Auditor's Comments
<p><u>BW2 - Recommendation 7:</u> The Procurement and Contract Services Section should develop guidelines for the use of GC/CM contracting methods that maximize opportunities to design and construct capital projects cost-effectively. WTD should provide input in the development of the GC/CM guidelines based upon lessons learned in designing and constructing the Brightwater project and other complex, large-scale capital projects.</p>	<p><u>Concur</u> WTD will prepare a "lessons learned" review of the GC/CM contracting process for Brightwater and the Executive will appoint an internal task force to develop guidelines for using GC/CM on future county projects.</p>	<p>"Lessons Learned" following completion of preconstruction services and MACC negotiation February 2007. Guidelines developed by fourth quarter 2007.</p>	<p>Postponed. The contracts subcommittee has requested those departments who have managed a GC/CM contract to start listing "lessons learned" to date. Concentrated work on this area will not begin until 2008. The subcommittee will be addressing all other audit recommendations prior to concentrating efforts in this area.</p>	<p>The decision to postpone implementation of this recommendation is reasonable. During 2007, the State Legislature adopted new laws for local jurisdictions authorized to use alternative delivery methods (e.g., GC/CM or design build) for major development/construction projects based on lessons learned. Under the new legislation, local government agencies will require formal certification from the Washington State Capital Project Advisory Review Board/ Project Review Committee to use alternative methods for major construction projects. The intent of the new law is to ensure that local governments have the knowledge, experience, and capacity to successfully manage major projects developed with non-traditional methods.</p> <p>We again recommend that the county revisit this topic if and when the county is certified by the state of Washington to use alternative methods. Input on lessons learned from WTD and the Facilities Management Division would be helpful at that time.</p>

Attachment C
Memorandum RE: Request for Review and Approval of Proposed Changes to
Construction Management Policies and Procedures

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King County
Office of
Management and Budget
Office of the King County Executive
701 Fifth Avenue, Suite 3200
Seattle, WA 98104

KING COUNTY AUDITOR

JUL 07 2008

RECEIVED

July 7, 2008

To: King County Executive Audit Committee Members
Sheryl Whitney, Assistant County Executive (Committee Chair)
Kurt Triplett, Chief of Staff
Theresa Jennings, Director, DNRP
Harold Taniguchi, Director, DOT
Bob Cowan, Director, OMB
Jim Buck, Director, DES
Kathy Brown, Director, FMD

From: David Lawson, Manager, Executive Audit Services *DL*

**RE: Request for review and approval of proposed changes to Construction
Management Policies and Procedures**

Enclosed for your consideration are five amended Executive policies involving the management of capital projects. These policies were reviewed extensively and revised by the Interdepartmental Forum in response to specific recommendations included in two consecutive (2005 and 2006) King County Auditor's reports pertaining to the procurement and contracting practices for the Brightwater project. The Forum asks that after you review these amendments you recommend them to the Executive for his approval and signature so they can become effective as soon as possible.

A central audit recommendation was to initiate an advisory forum to assess county-wide issues and best practices related to capital project contracting processes and contract management. In fact, this recommendation had already been implemented in 2005 prior to the final audit report. The executive branch formed an Interdepartmental CIP Forum ("the Forum") and began collaborative work concentrating on audit recommendations as a top priority. The Forum has a team charter, meets at least once a month and is comprised of upper level managers and staff from FBOD (Finance), Transit, Roads, Solid Waster, Facilities Management, Wastewater, the executive internal auditor and the PAO.

-Clarification of Project Control Officer Thresholds

Two audit findings recommended review and clarification of thresholds for Project Control Officer (PCO) assignments. One threshold established PCO assignments to contracts based upon the contract value and the other threshold established requirements

Attachment C — Memorandum RE: Request for Review and Approval of Proposed Changes to Construction Management Policies and Procedures

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for PCO review of amendments. Clarification of PCO responsibilities and thresholds impacted three existing contract management policies as follows:

- 7-7-1 Procurement for Capital Projects
- 7-8-1 Change Order/Amendment Administration
- 7-10-1 Project Control Officer

The Forum appointed a subcommittee to review the existing guidelines and policies for potential revisions. The subcommittee drafted guidelines and potential policy revisions. Consensus was achieved when a multi-level threshold was developed by this subcommittee. The subcommittee recommended this multi-level threshold to the Forum which was approved.

The subcommittee recommended a multi-level threshold based upon the results of research it performed on each department's/division's capital project contract and amendment history. The overall number, total value, number of amendments and relative size of amendments on these contracts were examined. Enclosed you will find a summary list of contracts by division. The subcommittee reviewed the contracting history for each of the agencies during periods approximately four years apart to test variances. Analysis of the results resulted in agreement by the subcommittee members (representing all affected agencies) that multi-level threshold was both reasonable and warranted based upon (but not limited to) the following:

- The Council audit acknowledged that some difference in thresholds may be reasonable for larger contracts.
- Most divisions have less than twenty-five percent of the Wastewater Treatment Division (WTD's) typical number of large consultant contracts.
- Increasing either the contract assignment or amendment review thresholds for most divisions would virtually eliminate Department of Finance (DOF) PCO oversight of contracts and amendments except for file audits.
- Setting contract assignment at \$2 million and amendment reviews at \$150 thousand is reasonable for the majority of implementing agencies (IA's).
- The average value of WTD's contracts are significantly greater than other divisions.
- Increasing the contract threshold for assignment of DOF/PCO to \$4 million for WTD will reduce the number of reviews by the DOF/PCO by less than 25 percent.
- WTD's contract amendment values are typically greater than \$300 thousand dollars, so it is unlikely to seriously impact the number of DOF/PCO amendment reviews.
- With the new WTD delegation of signature authority, efficiencies are anticipated for Project Representative amendments at smaller dollar values and should also reduce potential for negative schedule impacts.
- Due to the volume of contracting, WTD hired their own full-time WTD/PCO to perform reviews of its contracts and amendments. The WTD/PCO position was filled using the same qualifications as the DOF/PCO. This allows a better

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balancing of workload between the Division and the DOF/PCO relative to WTD contracts.

The rigorous review process, along with developing consensus on the process, will likely result in improved communications and cooperation between agencies. The continued coordination and work on contracting standards between both agency-level and countywide PCO functions will also result in more well-defined contract scopes and clearer cost analysis.

-Capital Project and Contract Planning and Management

There was an audit finding focused on the need to ensure that capital project are designed to fit within construction budgets and that there are stop work provisions in place to avoid unnecessary design costs. The affected policies are:

7-9-1 Capital Project and Contract Planning and Management
7-13 Introduction to Construction Management Policies and Procedures

The Forum spent considerable time clarifying the roles and responsibilities of project managers and project representatives. The underlying intent was to ensure that project managers have clearly defined expectations for capital project planning and management (note that the former policy only defined project representative and the new policy adds the definition of project manager).

The key element of CON 7-9-1 is that there are new guidelines for establishing a project budget for various phases of a capital project. Specifically, the baseline construction target for design scope, schedule and budget is established when there is adequate technical information to allow a reasonable basis for performance measures. The policy emphasizes that baseline construction targets should be established when 30 to 40 percent of a project's design is completed, depending on the project.

The Forum carefully considered the option of incorporating "design-to-target" provisions directly into A/E contracts but decided to take the approach of modifying CON 7-9-1 and placing this responsibility with the project manager. This approach allows Division's to exercise appropriate discretion to incorporate design-to-target expectations into the scopes of work for their projects, while still emphasizing overall accountability for avoiding unnecessary design costs.

-Recommendation

The Forum has exercised due diligence in amending current policies and the changes are responsive to recommendations in the 2005 and 2006 Brightwater audits. I am respectfully requesting your review and approval by July 31, 2008. If, after reviewing the material, you wish to meet as a group to discuss the proposed changes, let me know and I will schedule an Executive Audit Committee meeting for the earliest possible date

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to accommodate members' schedules. I will also arrange for Forum members to be available to explain the proposed changes and to answer questions.

If you have any questions please contact me, Ken Guy or Christie True. Thank you.

Attachments

CC: Ken Guy, Director, BFOD
Christie True, Director, WTD
David Leach, Procurement Services Manager