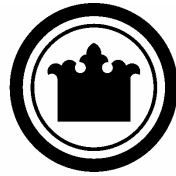


PERFORMANCE AUDIT

**KING COUNTY PROCUREMENT
PRACTICES FOR BRIGHTWATER
PROFESSIONAL DESIGN
ENGINEERING SERVICES**



King County

Presented to
the Metropolitan King County Council
Labor, Operations & Technology Committee
by the
County Auditor's Office

Cheryle A. Broom, King County Auditor
Susan Baugh, Principal Management Auditor
Wendy K. Soo Hoo, Senior Management Auditor
Jan Lee, Auditor Assistant

Report No. 2005-01
June 28, 2005

Metropolitan King County Council

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King County Auditor

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MEMORANDUM

DATE: June 28, 2005

TO: Metropolitan King County Councilmembers

FROM: Cheryle A. Broom, County Auditor

SUBJECT: Performance Audit of King County Procurement Practices for Brightwater Professional Design Engineering Services

Attached for your review is our report on King County Procurement Practices for Brightwater Professional Design Engineering Services. This performance audit examined the timeliness and cost effectiveness of the county's procurement and contracting practices for professional design engineering services. Best practices were also considered for procurement of professional design engineering services to identify potential opportunities for improvement.

The general audit conclusion was that the county substantially strengthened oversight of its procurement and contracting processes for professional engineering services during the past five years. The improved oversight processes provided greater assurance that county and ratepayer interests were adequately represented. However, the timeliness and effectiveness of the county's procurement and contracting processes could be further enhanced through performance-based scheduling, better collaboration among county agencies, and improved external communication with engineering firms.

The County Executive concurred with the audit recommendations and agreed to the following actions: 1) convene an interdepartmental forum to discuss procurement and contracting practices and performance standards; 2) establish an advisory committee comprised of engineering consultant representatives and senior county management to address further improvements to county procurement and contracting practices; and 3) retain an independent auditing firm in 2006 to review engineering compensation and annual salary escalation factors. The executive's response is provided in its entirety at the end of the audit report.

The auditor's office would like to acknowledge the cooperation received from the Wastewater Treatment Division Major Capital Improvements Section during the audit review. We also appreciate the Finance and Business Operations Division Procurement and Contract Services Section for its professional assistance throughout the audit process.

CB:SB:yr

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We conduct audits and studies that identify and recommend ways to improve accountability, performance, and efficiency of county government.

Auditor's Office Vision

We are committed to producing substantive work of the highest quality and integrity that results in significant improvements in accountability, performance, and efficiency of county government. We share a commitment to our mission, to our profession, and to a collaborative work environment in which we challenge ourselves to accomplish significant improvements in the performance of the King County Auditor's Office.



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Alternative Formats Available Upon Request

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EXECUTIVE SUMMARY

Introduction

This performance audit, mandated by the Metropolitan King County Council, focuses on procurement and contracting practices for the Brightwater Project, a major wastewater capital facility. The audit examines the efficiency and cost effectiveness of the county's procurement and contracting practices for professional design engineering services. Best practices are also considered for procurement of professional design engineering services to identify potential opportunities for improvement.

General Conclusions and Findings

During the past five years, the county substantially strengthened oversight of its procurement and contracting processes for professional engineering services. The improved oversight processes provided greater assurance that county and ratepayer interests were adequately represented. However, the timeliness and effectiveness of the county's procurement and contracting processes could be further enhanced through performance-based scheduling, better collaboration among county agencies, and improved external communication with engineering firms.

Scope and Objectives

Our review focused on county procurement and contracting processes for the Brightwater conveyance system professional engineering services to assess the:

- Efficiency and effectiveness of the county's procurement process for professional engineering services.

- Reasonableness of the planned and actual procurement and contracting schedules, and impact of schedule delays on the overall Brightwater Project capital project objectives; and
- County's compliance with guiding principles and performance standards identified in the Federal Acquisition Regulations to promote timely, competitive, and fair procurement processes to achieve the best value for county agencies and ratepayers.¹ In addition, we assessed county compliance with best practices for procurement of engineering services to identify potential opportunities for improvement.

We also determined the reasonableness of the county's contractual rates for select design engineering positions based on a survey of 11 public agencies and utilities. The assessment also draws upon comparative data from an industry recognized management salary survey.

Summary of Recommendations

The Procurement and Contract Services Section should continue to periodically assess and adjust compensation for design engineering services based on local and regional benchmarks, national salary surveys, and best management practices. The section should collaborate with county agencies on developing formal county performance standards and project-specific schedules. The project-specific schedules should conform to capital project delivery objectives to promote accountability to county ratepayers. In cooperation with county agencies and local engineering consulting firms, the section should also establish a task force or ongoing advisory forum to productively discuss best engineering procurement practices and issues.

¹ The *Federal Acquisitions Regulations* indicate that best value is achieved by balancing many competing interests to develop a system that works better and costs less.

Acknowledgements

The King County Auditor's Office wishes to acknowledge the Wastewater Treatment Division Major Capital Improvements Section for its time and cooperation during the audit review. We also appreciate the Finance and Business Operations Division Procurement and Contract Services Section for its professional assistance throughout the audit process.

1 INTRODUCTION

Audit Background

This performance audit, included in the council-adopted 2004 and 2005 King County Auditor's Office Annual Work Programs, focuses on the efficiency and cost effectiveness of the county's procurement of professional engineering services for the Brightwater conveyance facilities. (See Appendix 1 for an overview of the county procurement and contracting process.) It also compares county practices to industry best practices for procuring professional design engineering services to identify potential opportunities for improvement.²

Council Historically Interested in Major Capital Wastewater Treatment Facilities

The council has been historically interested in oversight and cost controls for major wastewater capital projects, and requested the County Auditor's Office *Construction Management Audit of the West Point and Renton Wastewater Treatment Facilities* (March 1996). The audit concluded that the Department of Metropolitan Services (now Department of Natural Resources and Parks) did not adequately represent the county's interests in controlling project costs and promoting cost accountability. The report identified substantial unwarranted payments and unexplained or unsupported construction costs, including associated design engineering expenses.

In response to the 1996 audit findings and recommendations, the County Executive issued a series of Executive Orders to strengthen oversight of major capital projects. The Department of Natural Resources and Parks' Wastewater Treatment Division and other agencies responsible for managing the county's capital

² For audit purposes, the term "contracting" refers to securing a professional services contract. The term "contract management" is used to distinguish contract implementation from contract procurement.

**County Capital Project
Oversight Function
Established**

projects established internal project control functions, and the Department of Finance (now Department of Executive Services Finance and Business Operations Division) created a countywide project control function in the Procurement and Contract Services Section. To ensure appropriate segregation of county oversight and project management functions, the Project Control Officer assumed responsibility for conducting independent reviews of county professional architectural and engineering contracts greater than \$2 million and construction contracts greater than \$10 million.

During the past five years, the Procurement and Contract Services Section assumed a more active role in ensuring countywide compliance with the executive's new capital project guidelines to improve the county's procurement and contracting effectiveness. The section also instituted a series of procedural changes to further strengthen the county's position in acquiring professional design services. For example, the Project Control Officer developed more formal parameters for exceeding the county's salary limit for high level engineering positions based on prevailing market conditions and other public agencies' compensation practices. The Project Control Officer established a fee structure and cost/price analysis for proposed engineering services, and more effective reviews of consultant proposals to identify potential cost reductions. These changes coincided with the initial Brightwater Project planning and design phases.

Brightwater Expands Capacity To Meet Demand

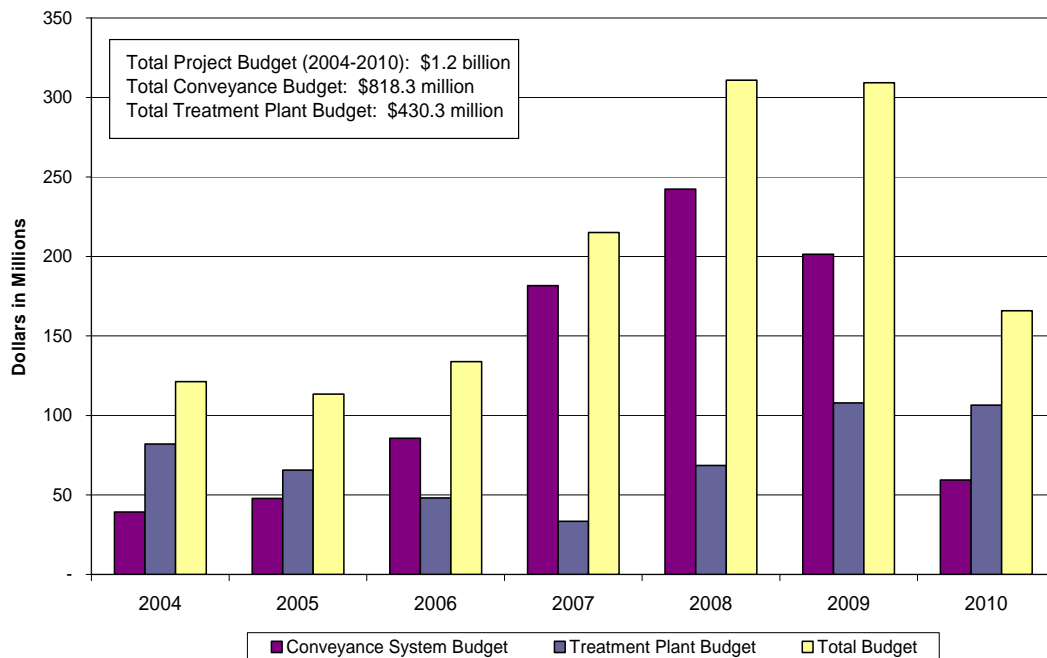
King County provides wastewater conveyance and treatment services for 34 local sewer agencies serving 1.3 million residents and businesses in King, Snohomish and Pierce counties. The county initiated development of the Brightwater Project in 1999, following the adoption of a Regional Wastewater Services Plan. The plan identified the need for a 36 million-gallon-per-day

treatment plant to meet future demand for wastewater services in King and south Snohomish counties by 2010. King County expects the Brightwater Facilities to be operational in 2010.

**Total Brightwater
Project Cost Estimated
at \$1.48 Billion**

Currently, the Brightwater Facilities costs are estimated at \$1.48 billion. Project cost estimates include the design and construction of a plant to treat and disinfect wastewater, conveyance facilities to carry wastewater to and from the treatment plant, and a marine outfall to discharge treated wastewater into Puget Sound. Exhibit A below displays the council-adopted annual capital project budgets for the Brightwater Facilities from 2004 to 2010, which total \$1.2 billion. (Note: Exhibit A does not include capital project costs incurred prior to 2004.)

EXHIBIT A
Brightwater Facilities Capital Project Budgets (in Millions)—2004 to 2010



Note: The \$1.2 billion figure does not include the capital project costs incurred from 2000 to 2004.

SOURCE: King County Wastewater Treatment Division Capital Improvement Plan: Council Adopted Budget Summary 2005 – 2010, December 2004.

**Local Engineering
Firms Interested in
Procurement and
Contract
Improvements**

As shown in Exhibit A, capital project budget estimates for the Brightwater conveyance system design and construction total \$818.3 million. Conveyance design engineering services accounted for approximately \$35 million of the total conveyance system budget estimates.

Engineering Firms Raise Concerns

On behalf of local engineering firms, the American Council of Engineering Companies (ACEC) of Washington filed a written protest in 2002 regarding the reasonableness of the consultant selection process for the predesign of the Brightwater conveyance system. The complaint also cited other efficiency, effectiveness, and equity issues pertaining to general county procurement and contracting practices. Despite the efforts of county representatives and an executive-appointed ACEC Task Force to resolve the issues, the engineering firms were dissatisfied with the negotiated solutions.

Twelve (12) engineering firms met with the County Executive in 2005 to discuss concerns regarding procurement and contracting processes. Concessions sought included greater flexibility in negotiating and administering professional services contracts; eliminating salary limits and other financial restrictions; and minimizing administrative time and expenses.

Audit Scope and Objectives

Our evaluation focused on the county's procurement and contracting processes for the predesign and final design of the Brightwater conveyance system, which included:

- Analyzing the efficiency and effectiveness of the county's procurement and contracting processes based on public policies and industry standards that promote timeliness, fairness, and best value;

- Evaluating the reasonableness of the county's contractual rates for select project management services based on an audit survey of 11 public agencies and utilities, and an industry recognized 2004 management salary survey;
- Determining the reasonableness of the planned and actual schedules for procuring professional engineering consultant services, and the impact of delays on the overall Brightwater Project schedule; and
- Researching best practices in professional services procurement and contracting to identify potential opportunities to improve the efficiency and effectiveness of county procurement practices.

Scope of Work on Internal Controls

The audit included an extensive review of relevant county laws, policies, executive orders, procedure manuals, procurement and project files, and reports to assess whether the internal controls were adequate for the two Brightwater conveyance project procurement processes. The internal controls consisted of a series of required project documents and formal approvals from Wastewater Treatment Division and Procurement and Contract Services Section management as procurement and contracting tasks are completed (e.g., independent cost estimates, summaries of the selection and negotiation processes, etc.).

The audit was conducted in accordance with government auditing standards. The audit review period was from July 2004 through April 2005.

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2 BRIGHTWATER PROCUREMENT AND CONTRACTING PRACTICES

Chapter Summary

This chapter discusses the reasonableness of the county's procurement and contracting processes, focusing on compensation and scheduling for two Brightwater design engineering contracts. The primary objective was to determine whether county practices promote fairness, timeliness, and best value in procurement of professional design engineering services.

Summary of Findings

County Obtains Quality Design Engineering Services at Reasonable Price

The Brightwater procurement and contracting practices were effective in ensuring that the county and ratepayers obtained quality design engineering services at a fair price, although rates can be expected to change due to fluctuating economic conditions. However, the timeliness of the procurement process could be strengthened to ensure conformance to overall capital project delivery schedules. The Procurement and Contract Services Section, in cooperation with the Wastewater Treatment Division and other county agencies, has streamlined some procedures and is actively pursuing other initiatives to improve the timeliness of its professional services procurement and contracting process.

Summary of Recommendations

- The Procurement and Contract Services Section should continue to periodically assess the reasonableness of compensation for design engineering services based on local trends, national salary surveys, and best practices.

- The Procurement and Contract Services Section should establish a formal performance standard to measure the timeliness of professional services procurements. The Procurement and Contract Services Section, Wastewater Treatment Division, and other county agencies should also collaboratively establish project-specific procurement schedules at the onset of each procurement process to promote timeliness and accountability.
- All county agencies should be responsible for conforming to project-specific procurement schedules, with exceptions for delays beyond the county agencies' control. Agency compliance with procurement schedules should be evaluated periodically for reasonableness and adjusted as necessary.

BRIGHTWATER AND COUNTY ENGINEERING COMPENSATION PRACTICES

County Implements Initiatives to Improve Cost-Effectiveness of Professional Services Contracts

As noted in Chapter 1, the Procurement and Contract Services Section assumed an active oversight role in executing professional design engineering services contracts greater than \$2 million. Initiatives to promote cost-effective county contracts included performing in-depth cost/price analysis of proposed overhead rates and fees; establishing a \$65 limit on hourly direct (unburdened) labor rates for high-end principals and project managers; and justifying or restricting hours for engineering experts and other principals with premium labor rates.

Local engineering firms complained about the fairness of these practices, and indicated that the county no longer offered sufficient compensation and profit to cover business costs. Because the new cost controls required more time for additional analyses and reviews, the Wastewater Treatment Division also expressed concerns about the potential impact of increased processing time on the Brightwater Project schedules.

FINDING 1**Strengthened Oversight of Procurement Process and Reduced Engineering Compensation and Profits Resulted in More Cost-Effective Design Engineering Services.**

Procurement and Contract Services Section Identified \$4.5 Million in Potential Brightwater Design Engineering Work Hour and Cost Reductions

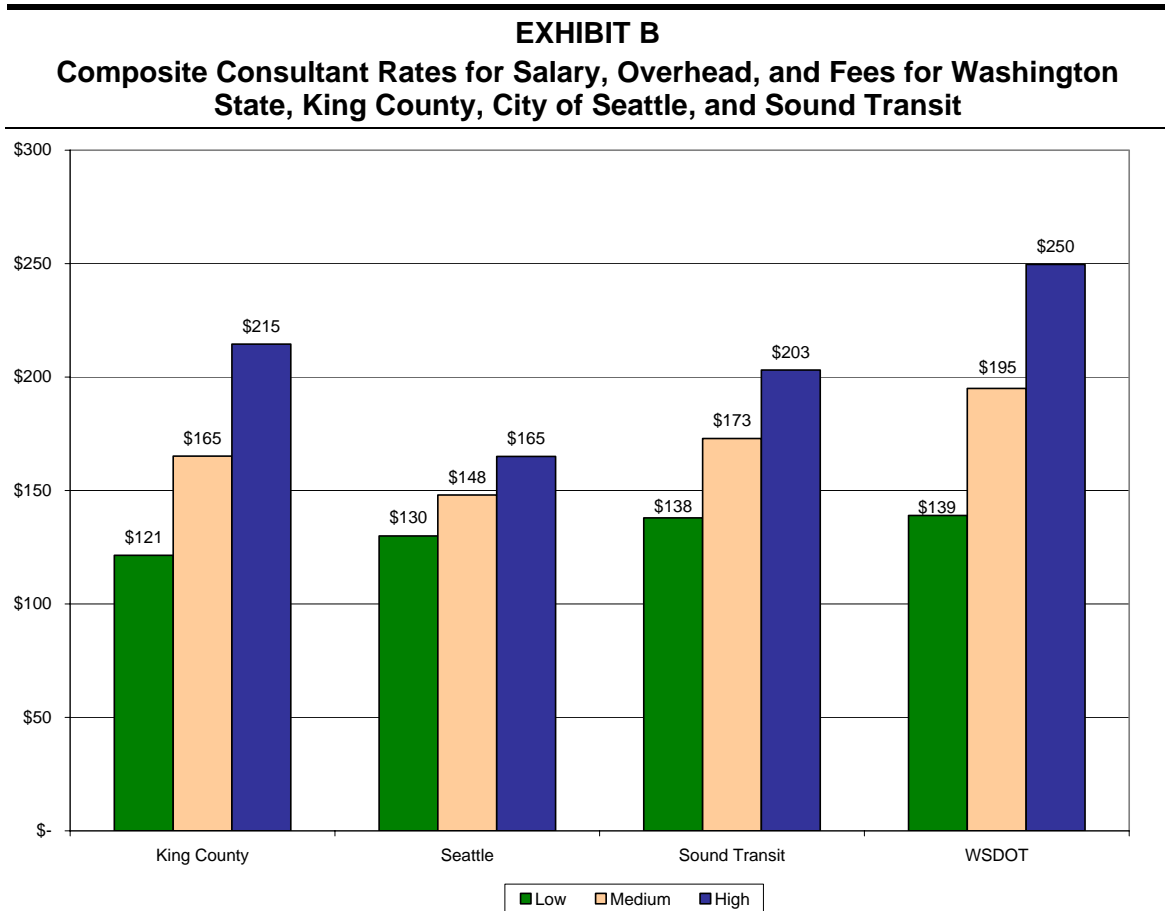
The Procurement and Contract Services Section implemented effective cost restrictions during its cost/price reviews to ensure that the county contracts were more competitive. During the negotiations for the Brightwater conveyance predesign contract, for example, the section and the Brightwater project manager initially identified \$2.3 million in work hour and scope-related cost reductions, and later identified an additional \$2.2 million in potential reductions.

Given the engineering community's concern about the equity of the county's current 2004 contractual rates, we assessed the county's compensation for design engineering project managers and principals based on a survey of 11 public agencies and utilities. Seattle Public Utilities, Sound Transit and the Washington State Department of Transportation were included in the survey because they contract with the same engineering firms and personnel as King County agencies. Engineering firms also consistently identified the Department of Transportation procurement and contracting practices, including negotiation of fair and reasonable rates, as the "model" for public agencies. The other public agencies and utilities were selected as operators of multiple water or wastewater facilities that were recently developed or undergoing major capital improvement.

Composite Consultant Compensation Rates Calculated and Compared for Surveyed Public Agencies

Because the agencies provided the contractual compensation data in ranges, we calculated a composite low-, mid- and high-range value for each agency based on the direct salary, overhead and profit. (Bonuses and markups were not included in the comparative analysis below due to the varying practices of the surveyed agencies but are discussed later in this finding.) Exhibit B below displays the composite salary, overhead and

profit rates for the four public agencies located in Washington State. (Appendix 2 lists the low-, mid-, and high-range rates for King County and all 11 surveyed agencies.)



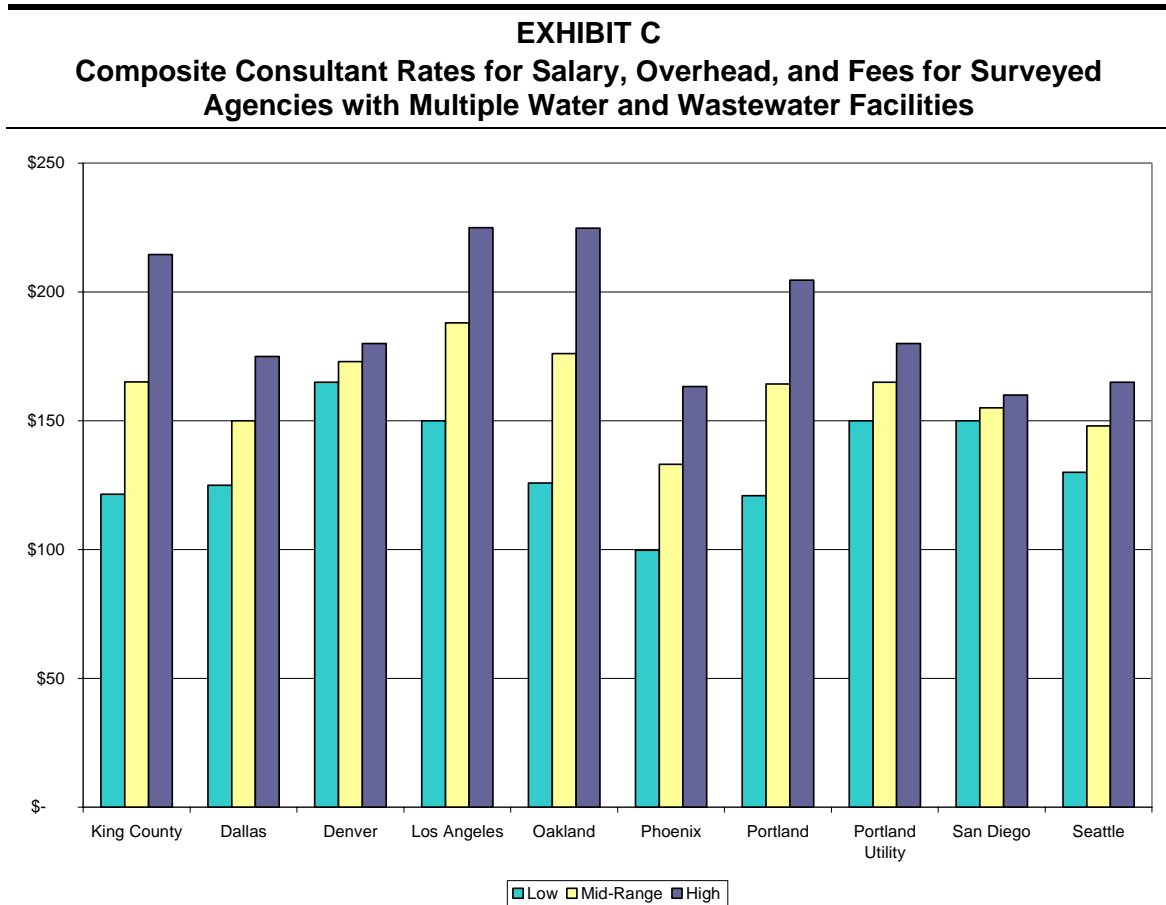
Note: The Washington State Department of Transportation figures are for *principals only* due to the department's request not to average project manager and principal rates. Note that the Washington State Department of Transportation's fully loaded labor rates for *project managers* are \$117 at the low end; \$156 at mid-range; and \$203 at the high end.

SOURCE: King County Auditor's Office Engineering Consulting Compensation Survey, 2004.

As shown in Exhibit B, King County's low- and mid-range direct salary, overhead and profit rates were comparable to the rates for Seattle Public Utilities and Sound Transit. The county's high-end rate moderately exceeded the rates for Seattle Public Utilities and Sound Transit. However, the Department of Transportation rates were higher than those for the county,

Seattle Public Utilities, and Sound Transit in all three ranges, with significantly higher rates at the mid-range and high-end.

Exhibit C below displays the county rates as well as the rates for the other surveyed water and wastewater agencies in the western region.



SOURCE: King County Auditor's Office Engineering Consulting Compensation Survey, 2004.

As shown in Exhibit C, the county rates are consistent with those for the other water and wastewater agencies. Note that the Los Angeles and Oakland rates were slightly higher, and the Phoenix rate was slightly lower than the county rates, which would be expected due to differences in regional living costs.

Exhibit D below provides a ranking of King County and all 11 surveyed agencies based on the negotiated mid-range rates. We used the mid-range rates, because they represent the typical compensation for engineering consultant services. (The composite rates shown in Exhibit D are the same mid-range figures displayed in Exhibits B and C above, but are shown for all agencies in descending order.)

Exhibit D		
Agencies' Mid-Range Engineering Consultant Compensation Rates Compared to Average Compensation Rate		
Agency	Mid-Range Estimate	Difference from Average
Agencies Above Average (\$165) Compensation Rate		
Washington State Dept. of Transportation	\$195	\$30
Los Angeles Sanitation	188	23
East Bay Municipal Utility District	176	11
Sound Transit	173	8
Denver Metro	173	8
Agencies at Average (\$165) Compensation Rate		
King County	\$165	--
Portland Clean Water Services	165	--
Agencies Below Average (\$165) Compensation Rate		
City of Portland	\$164	-\$1
City of San Diego	155	-10
City of Dallas	150	-15
Seattle Public Utilities	148	-17
City of Phoenix	133	-32
Note: The Cities of Phoenix and San Diego, Denver Metro, and Portland Clean Water Services do not offer consultant or project bonuses. East Bay Municipal Utility District, Los Angeles Sanitation, the City of Dallas, and the City of Portland allow markups on subconsultant charges that are not reflected in the above rates.		

SOURCE: King County Auditor's Office Engineering Consulting Compensation Survey, 2004.

County Compensation Rates Were Consistent with Surveyed Public Agencies' Rates

As shown in Exhibit D, King County's typically negotiated rate of \$165 falls at the median for all 12 agencies' rates, and is equal to the average rate. A similar result was achieved when we adjusted the rates based on differences in regional living costs, using data from the Bureau of Labor Statistics National Compensation Survey. The National Compensation Survey is one of many national indices used for regional cost-of-living comparisons, and was recommended by the King County Labor Relations Analysts. Our analysis indicated that the adjusted average rate was \$160 (in Seattle dollars) for all 12 agencies, only \$5 less than the county's mid-range rate. Thus, the survey results indicate that the county's rate is reasonable. (Appendix 3 lists the adjusted low-, mid-, and high-range rates for King County and the 11 surveyed agencies.)

The county's high-end figure of \$215 shown in the above exhibits is based on an hourly direct labor rate of \$65, which has been established as the county's maximum direct labor rate. Because the local engineering firms were dissatisfied with direct salaries for high-end project managers and principals, we also compared the reasonableness of the county's \$65 high-end limit on the hourly direct labor costs for senior vice presidents, principals, and senior project managers in the 2004 PSMJ A/E Management Salary Survey, published by PSMJ Resources, Inc. The PSMJ survey is a broadly recognized annual industry survey. The 2004 survey included salary data from more than 130 design firms and 5,398 individual design managers. (Note: The PSMJ survey covers a wide range of engineering disciplines that are not all representative of water and wastewater engineering services.)

County's Rates Were Consistent with or Higher Than the 2004 Nationwide Average for Senior Vice Presidents, Principals and Senior Project Managers

Based on the PSMJ survey data, the county's \$65-per-hour direct salary limit for principals and high-end project managers was higher than the 2004 nationwide average salary rates of \$59 per hour for senior vice presidents, \$47 for principals, and \$37 for senior project managers. The county's \$65 salary limit was also slightly higher than the average West Coast rate of \$64 per hour for senior vice presidents, but significantly higher than the average rates of \$49 for other principals and \$40 for senior project managers.

The PSMJ survey indicated that the engineering and construction industry had declined nationwide since 2001, and that industry salaries also fell in response to the nation's slow economy. According to the survey, engineering management salaries continued to be less than expected in 2004 and slightly lower than 2003 salaries. Direct salaries for Puget Sound region engineers can be expected to increase in 2005 as the economy continues to improve regionally.

It is important to note that the direct labor rates above are industry averages, but the county's maximum rate of \$65 was also consistent with the surveyed public agencies' average rates for principals only. The mid-range average rate for *principals only* was \$57, while the average high rate was \$67, only \$2 more than the county's \$65 limit. (The highest direct labor rate for principals was \$80 among the surveyed agencies.)

Public Agencies Avoid Exceeding Historical Salaries During Contract Negotiations

The county occasionally exceeds its \$65 limit on direct salary rates for some principals and engineering consultants with highly specialized expertise. When established salary rates are exceeded, however, the Procurement and Contract Services Section and other county agencies closely scrutinize the consulting firm's proposed scope of work and level of effort analysis to ensure that the work is essential and the work hours

are reasonable. This practice was standard for all surveyed agencies, when select owners, principals and project managers were paid at rates higher than \$65. Another standard practice was to avoid exceeding established salary rates for all engineers based on historical contractual salary data that the public agencies maintained for the engineering firms.

In response to the local engineering firms' compensation concerns, we also reviewed the Procurement and Contract Services Section's cost/price analyses for the two Brightwater conveyance projects to assess whether the overhead rates and fees were reasonable. We also compared the county methodology for determining compensation to the approaches used by the surveyed agencies to assess the reasonableness of the county's practices. Despite different approaches across the surveyed agencies in negotiating rates (e.g., use of composite multipliers rather than separately negotiating direct salary, overhead, and fees), the county's practices were comparable to those for the other public agencies and considered the same factors. Agencies commonly referred to the Federal Acquisition Regulations as their guide for establishing indirect costs as well as other direct costs.

**County Overhead Rate
Analyses Were
Consistent with Federal
Acquisition Regulations**

During the review of the Brightwater Project documents, we confirmed that the county rate analyses were not only consistent with the Federal Acquisition Regulations, but also included citations of relevant code provisions. The process established for determining consultant fees (i.e., based on a weighted assessment of project complexity, risk, etc.) and project bonuses were also consistent with the regulations.

Variations were noted in the areas of project bonuses and subconsultant "markups" (e.g., a prime consultant management fee based on subconsultants' expenses). Five surveyed

agencies did not offer project bonuses. One agency offered a maximum “plus 10 percent bonus/minus 10 percent penalty” based on project performance. Six surveyed agencies incorporated personnel or project bonuses that ranged from 10 to 15 percent within the negotiated overhead rates. King County, Sound Transit, and the Washington State Department of Transportation allow up to a 15-percent bonus within their negotiated overhead rates for design engineering contracts.

King County and seven of the surveyed agencies did not allow prime consultants to mark up subconsultant charges. King County compensates prime consultants for the direct labor hours associated with supervision or management of subconsulting firms. The remaining four agencies allowed markups on subconsultant charges that ranged from five percent for large projects to ten percent for smaller projects, but one agency did not allow a project bonus. Although agencies that offered bonuses generally applied a standard rate, the markup rate varied from project to project. However, the county’s compensation practices generally adhered to the common practices among the surveyed agencies.

**Local Engineering Firms
Continue to Conduct
Business with King
County Despite
Compensation Issues**

Concern was expressed that local engineering firms would no longer elect to do business with the county due to the revised compensation practices. To determine whether this concern was valid, we requested information on 12 local engineering firms’ recent contracting activities. Exhibit E below displays the information available for 11 of the 12 firms on the number and value of contracts and amendments that were active between 2000 and 2005. (Data was unavailable for one subconsulting firm that was not a regular vendor before the cost reductions were implemented.)

EXHIBIT E
2000 to 2005 Professional and Design Contracts for Select Consulting Firms

Company	Total County Contracts	Total Prime Contract Amount (millions)	Total Amount Retained by Prime and Subconsulting Firms (millions)
Prime Brightwater Consultant	10	\$61.6	\$29.0
Prime Transportation Consultant	3	1.0	0.11
Brightwater Subconsultant	3	0	0.5
Brightwater Subconsultant	24	2.7	2.8
Brightwater Subconsultant	5	3.4	0.6
Brightwater Subconsultant	14	7.4	5.0
Prime Transportation Consultant	8	5.6	3.5
Brightwater Subconsultant	5	0.4	0.7
Brightwater Subconsultant	28	0.5	3.6
Brightwater Subconsultant	13	0	2.7
Brightwater Subconsultant	4	0	0.2
Total	117	\$82.6	\$48.71

Note: The total contract amount includes contract amendments and some work order contracts for which the firm was the prime consultant. However, the firms listed above are also participants in 33 work order contracts valued at an additional \$21.4 million that are not apportioned in the above totals. The total amount retained by firm includes the direct proportion of contract funds but not their share of work order contract funds.

SOURCE: Procurement and Contract Services Section, April 2005.

As indicated in Exhibit E, most of these local engineering firms continued to contract with the county from 2000 to 2005. The Procurement and Contract Services Section indicated that the majority of these contracts were either executed or amended in or after 2003. In addition, we confirmed that most Brightwater prime consultants and subconsultants continued to pursue new county contracts during 2003 and 2004, after the Procurement and Contract Services Section fully implemented its cost/price analysis procedure and cost reductions.

Recognizing the importance of the local engineering firms to the successful design and construction of major capital projects, additional steps can be taken to ensure that both the county and firms consider the compensation to be fair as the economy improves in 2005 and beyond. King County could establish an advisory forum for these and other local firms to productively address common equity and other issues inherent in the

procurement and contracting process. Chapter 3 of this report provides information on best practices that promote open communication to more effectively resolve professional services contracting issues.

BRIGHTWATER PROCUREMENT SCHEDULING PERFORMANCE

Local engineering firms and the Wastewater Treatment Division expressed concern about the timeliness of county procurement and contracting processes. Procurement and contracting process delays can impact business operations (such as efficient staff scheduling, cash flow, etc.) and ultimately the efficient delivery of public facilities and services for county ratepayers.

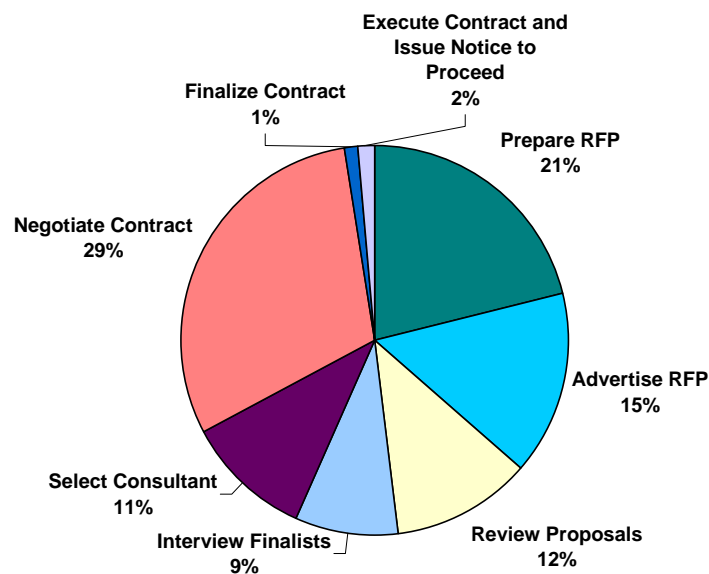
Formal Performance Standard Needed to Promote Accountability

In response to the engineering firms' and the Wastewater Treatment Division's concerns, the Procurement and Contract Services Section streamlined its procedures and practices to reduce processing time and the cost of preparing design proposals during the past two years. Examples include providing consultants better information on the proposed project scope; advance notice of fees and other contractual requirements; posting standard contract boilerplates on the county Web site; restricting the length of proposals; and eliminating interview requirements whenever possible. Although these improvements helped reduce processing time for professional services procurements, a formal standard was not developed to allow the county to measure its scheduling performance. A formal performance standard is needed to promote adherence to project-specific schedules as well as overall capital project delivery schedules by each responsible agency to ensure accountability to county ratepayers.

Brightwater Conveyance System Predesign and Final Design Procurement Scheduling Practices

Exhibit F below displays the sequence of the county's key procurement and contracting activities. It also displays a percentage distribution of the time (in days) required to perform key procurement and contracting tasks.

EXHIBIT F
Time Distribution for Key Procurement and Contracting Activities



SOURCE: King County Procurement and Contract Services Section, "Professional Advertised Process Timeline," June 2001.

The time distribution shown in Exhibit F is based on the Procurement and Contract Services Section's suggested 198-day timeframe for a professional services contract with an extensive project scope and multiple subconsultants. Some process steps may be compressed or lengthened, however, to ensure that project-specific timeframes are reasonable based on project scope, client priorities, and availability.

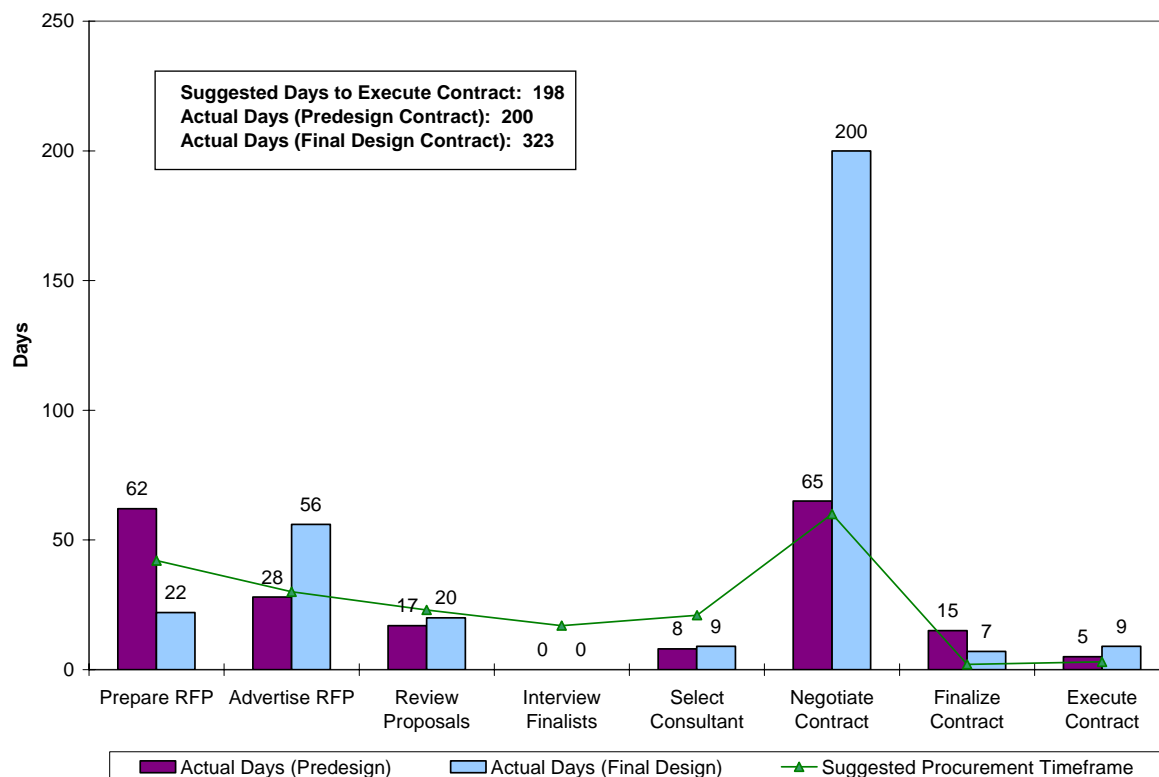
FINDING 2

County Procurement Scheduling Practices Could Be Improved to Ensure Reasonableness and Compliance with Planned Capital Project Delivery Schedules

We reviewed the timeliness of the procurement and contracting processes for the predesign and design of the Brightwater conveyance systems based on the estimated 198-day timeframe. The results are displayed in Exhibit G below.

EXHIBIT G

Suggested Timeframe and Actual Timelines for the Brightwater Conveyance Procurement and Contracting Processes



SOURCES: Procurement and Contract Services Section, "Professional Advertised Process Timeline," June 2001, and Procurement and Contract Services Section and Wastewater Treatment Division Procurement and Project Management Files.

Conveyance Predesign Procurement and Contract Completed on Time

As shown in Exhibit G, the \$11.2 million predesign contract required 200 days to execute, which was consistent with the 198-day estimated procurement timeframe suggested by the Procurement and Contract Services Section for highly complex

design projects. The timeframe was also consistent with the selection schedule developed by the Wastewater Treatment Division and published in the request for proposals issued for the Brightwater conveyance system predesign contract.

The \$24 million final design contract was executed in approximately 323 days, which substantially exceeded the suggested 198-day timeframe. The June 25, 2004 contract execution date also exceeded the planned execution date of January 30, 2004 published in the request for proposals. The 323-day timeframe includes 200 days for negotiation of the final design contract, which was three times longer than the Procurement and Contract Services Section's 60-day estimate for highly complex projects.

**Final Design Joint
Venture Arrangement
Contributed to
Procurement and
Contracting Process
Delays**

Numerous factors contributed to the lengthy negotiations process, including the magnitude of the scope, the large number of subconsultants on the project team, the formation of a joint venture (a formal third corporate entity) as the prime consultant, and cost analysis issues.³ Preparation of the county's final terms and conditions (boilerplate) was also delayed due to revisions required to qualify for State Revolving Funds. After the final terms and conditions were provided to the joint venture, the firm initiated negotiations on a new contract clause, and one partner encountered problems obtaining insurance due to Risk Management's requirement that each partner indemnify the other firm as well as King County.

The Wastewater Treatment Division and Procurement and Contract Services Section have differing perspectives on which issues most significantly impacted the timeliness of the contract negotiations and execution process. Both agencies agreed that

³ Joint ventures are legal partnerships formed when unique expertise is required, or a project is too large or complex for a single firm to undertake. Both partners are jointly and severally liable for the acts, neglects and omissions of the partnership.

improvements were needed, however, including better collaboration to increase the timeliness of professional services procurement and contracting processes.

During the audit survey, we asked the 11 public agencies and utilities to estimate the timeframes typically required to negotiate and execute contracts for complex professional design engineering services. The average timeframe for the surveyed agencies was 100 days with a high of 180 days estimated for highly complex projects. Thus, the 323-day timeframe for the procurement of final design engineering services substantially exceeded the county's suggested 198-day timeframe as well as the surveyed agencies' 180-day high estimate.

**Extended Final Design
Procurement Process
Impacted Brightwater
Project Schedule by Two
and One-Half Months**

The Wastewater Treatment Division was concerned about the impact of procurement delays on the overall Brightwater Project schedule and cost, and estimated that the lengthy process resulted in an overall Brightwater Project schedule delay of two and one-half months. The division also determined that the delay in executing the final conveyance design contract resulted in a potential loss of \$1.6 million (unaudited) in incremental inflation costs associated with the delayed start of the Brightwater East Tunnel and Influent Pump Station Construction Contract, and incremental division staffing costs incurred due to the delayed execution of the final conveyance design contract. According to the division, however, the potential \$1.6 million loss may not be realized, or may be superceded by the cost of other non-procurement Brightwater Project schedule delays.

Brightwater Scheduling Issues Indicate Need to Promote Greater Accountability and Consistent Performance in County Procurement Scheduling Practices

Both the Procurement and Contract Services Section and Wastewater Treatment Division have committed to collaboratively establishing realistic project-specific procurement schedules in the future. Both agencies recognize the importance of being accountable to capital project schedules, and of avoiding the cost of delays that may have a significant impact on overall project costs.

In fact, the Procurement and Contract Services Section refined its scheduling template for procurement of complex, advertised professional services contracts that exceed \$25,000 during the audit. Although the revised format establishes a more realistic timeframe for procurement activities, the Brightwater final design procurement scheduling issues suggest that the county's overall scheduling practices could be improved through the collaborative development of a formal performance standard.

Effective Collaboration on Project-Specific Schedules Could Be Developed at Onset of Procurement Process

For example, the Procurement and Contract Services Section and lead county agencies could collaborate on developing formal project-specific schedules at the onset of each procurement process. The schedule could be condensed or expanded to accommodate the overall capital project delivery schedule and planned process steps (such as preliminary bidders' conferences, formal interviews, etc.). Again, all County agencies would be accountable for adhering to the schedule once a mutually acceptable schedule is developed.

Unanticipated schedule conflicts caused by factors outside of the county's control, such as delayed responses from consulting firm to information requests, would not be included in the count of actual days required to complete the procurement. Similarly,

delays caused by unique contracting, legal or other project requirements that require additional time for planning or arrangements would not be counted against the project schedule.

Brightwater Conveyance Project Managers Generally Adhered to County Policies and Procedures, but Checklist Would Improve Documentation Practices

During the review of the Brightwater procurement schedules, we also reviewed the project documentation to confirm that county policies and procedures were followed. The *King County Procurement Manual for Professional and Construction Services* and Wastewater Treatment Division procurement manuals identify approximately 45 process steps for procurements of professional services and contracts with values that exceed \$25,000. We confirmed that all process steps were completed and documented for the Brightwater conveyance predesign project, including the required management authorizations at the end of the consultant selection and contract negotiation phases. (See Appendix 1 for an overview of the county's procurement and contracting process.) We were unable to locate documents or other verification that some required steps in the Brightwater conveyance final design procurement process were completed in compliance with county and Wastewater Treatment Division procedures. Consistent use of existing county procurement checklists (including placement of the checklist in the project management files) would be beneficial to ensure that project managers adhere to and document all key process steps that are not formally waived by agency management.

RECOMMENDATION 1 The Procurement and Contract Services Section should continue to periodically assess the reasonableness of compensation for design engineering services based on national salary surveys and best practices. 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.

RECOMMENDATION 2 The Procurement and Contract Services Section should continue to refine its procurement process schedule template that can be expanded or condensed based on the complexity of capital design projects, and establish performance standards for timely procurement processes. County agencies involved in capital project procurement should be given an opportunity to provide input on the schedule template and timeframes based on unique agency and project requirements.

RECOMMENDATION 3 The Procurement and Contract Services Section should collaborate with the Wastewater Treatment Division and other county agencies to establish project-specific procurement schedules, consistent with overall capital project delivery objectives and established performance standards.

RECOMMENDATION 4 The Procurement and Contract Services Section and all county agencies should comply with the procurement schedules established at the onset of each procurement process to promote accountability to county ratepayers and taxpayers. Procurement schedule delays should be justified on the basis of significant or unique circumstances.

RECOMMENDATION 5

The Wastewater Treatment Division and other county agencies should consider adapting the existing county procurement checklists to ensure that project managers adhere to and document all key process steps that are not formally waived by agency management.

3 BEST PROCUREMENT AND CONTRACTING PRACTICES

Chapter Summary

Chapter 3 assesses the two Brightwater conveyance design procurement and contracting processes, as well as general county practices, based on best practices identified during the audit review. The objective was to identify opportunities for further improvement to promote greater efficiency, effectiveness and accountability in county procurement and contracting practices.

Summary of Findings

The Procurement and Contract Services Section, Wastewater Treatment Division, other county agencies, and local engineering firms do not have an open forum to address common efficiency, effectiveness and equity issues in the county procurement and contracting process. An open and productive advisory forum would be beneficial for all interested parties to collaborate on issues; develop formal performance standards to ensure accountability to county ratepayers; and consider the merits of implementing current and emerging best practices for continuous improvement of the county procurement and contracting process. Without an open forum to address issues from a broad stakeholder perspective, the county is likely to continue to receive complaints from the local engineering industry, or may implement ineffective resolutions. (Note: The Procurement and Contract Services Section, along with representatives from county agencies, have selectively met with local engineering firms since 2001 to identify improvements to the procurement process, and to the county's contractual terms and conditions.)

Summary of Recommendations

The Procurement and Contract Services Section, in cooperation with the Wastewater Treatment Division, other county agencies, and local engineering firms, should establish an advisory forum to productively address procurement and contracting issues.

The forum should also be used to collaborate on the development of formal standards to evaluate consultant and project performance, and to assess the merits of implementing emerging best practices.

PROCUREMENT STANDARDS AND BEST PRACTICES

As discussed in Chapter 1, the American Council of Engineering Companies filed a protest in 2002, which led to a series of meetings between the county and three local engineering firms to resolve procurement issues. In addition, 12 consultant engineering firms met with the County Executive in 2005 to discuss the initial and additional issues regarding county procurement and contracting practices. Although the initial complaint focused on issues that surfaced during the Brightwater conveyance predesign consultant selection process, the engineering firms also raised broader county efficiency, effectiveness and equity issues.

Local engineering firms referenced the Federal Acquisition Regulations as an important resource in suggesting resolutions to procurement and contract issues. The Federal Acquisition Regulations contain guiding principles as well as uniform policies and procedures for government procurement of goods and services. The regulations are used extensively by public agencies and private consulting and construction firms that engage in procurement processes for capital project planning, design and construction services.

**Four Performance
Standards for Public
Agency Procurements**

Four general performance standards, applicable to both public agencies and private firms, are cited in the Federal Acquisition Regulations and paraphrased below:

- *Satisfy the customer in terms of cost, quality, and timeliness of the delivered product or service* by maximizing use of private services; using contractors with a track record of successful past performance or superior ability to perform; and by promoting competition.
- *Minimize administrative operating costs* by ensuring that the benefits of rules and regulations exceed the cost of administration, and balancing the goals of consistency and innovation.
- *Conduct business with integrity, fairness and open communication* to maintain trust among team members, internal and external customers, and the public.
- *Fulfill public policy objectives* by supporting the attainment of public policy goals while ensuring the efficient use of public resources.

Recent national evaluations of procurement processes indicated that public agencies do not consistently meet the overarching objective of delivering the best service. Our research also indicated that the county could benefit from implementing select best practices to achieve greater compliance with the Federal Acquisition Regulations' guiding principles, particularly delivering quality services in a cost-effective and timely manner.

COUNTY COMPLIANCE WITH PROCUREMENT BEST PRACTICES

Exhibit H below considers seven best practices in achieving acquisition services in relation to the specific Brightwater procurement processes as well as general county practices. A review of the county's compliance with the best practices follows the exhibit and offers comments on how establishing an ongoing advisory forum of county procurement stakeholders could further improve the county's practices. A forum would help build broader consensus around new initiatives or changes intended to improve the procurement and contracting process. Maintaining effective relationships over time is another important benefit, because the county repeatedly contracts with the local engineering firms.

EXHIBIT H			
County Compliance with Best Procurement Practices			
Best Practice	In Practice	Partially In Practice	Not In Practice
Establish the team		✓	
Define the problem	✓		
Consider public- and private-sector solutions		✓	
Develop a performance work statement or statement of objectives	✓		
Decide how to measure and manage performance	✓		
Select the right contractor	✓		
Manage performance		✓	

SOURCES: U.S. Office of Federal Procurement Policy, "Seven Steps to Performance-Based Services Acquisition," 2000, and U.S. Government Accountability Office, "Leading Practices in Capital Decision-Making," 1998.

As shown in Exhibit H above and discussed below, the county has fully implemented four and partially implemented three of the seven best practices for procurement of professional services.

Best Practice:
Establish the Team
(Partially In Practice)

Achieving superior project performance requires a team approach. The guiding principles for the Federal Acquisition Regulations indicate that participants must not only work together as a team, but also conduct business with integrity, fairness and open communication to maintain trust among team members, internal and external customers, and the public.

The county's Procurement and Contract Services Section and other county agencies have redefined their roles and responsibilities during the past five years. The section has also established procedures to promote effective communication during the procurement process and has implemented practices to promote cost-effectiveness for the benefit of public ratepayers. Brightwater and other county project managers view the Procurement and Contract Services Section as a professional resource as well as oversight agency. For example, Brightwater project managers commented favorably on the section's efforts to implement consultant compensation parameters that were useful in negotiating contracts. The Procurement and Contract Services Section acknowledged the important role of the Brightwater and other county agency project managers in terms of knowledge, responsibility, and ability to adapt to changing practices to accommodate broader county policy objectives.

Recurring complaints from the local engineering community indicated that greater efforts were needed to foster a team environment with external county partners. During 2003 and 2004, the Procurement and Contract Services Section and Wastewater Treatment Division met regularly with three representatives from the local engineering community in an effort to resolve procurement and contracting issues. The negotiated solutions, however, did not receive approval from the general engineering community. Other public agencies have established ongoing advisory forums with broad representation from local

engineering firms (as well as internal agency work groups) to jointly collaborate in developing policies and long-term solutions to procurement and contracting issues. Regular meetings are scheduled to address routine process issues, and special purpose committees are organized to respond to complex issues or consider new policies and practices.

Best Practice: Define the Problem (In Practice)

In evaluating the adequacy of problem statements or definitions for major capital projects, public agencies generally conduct and document thorough assessments to ensure that capital delivery objectives are met. The need for the development of the Brightwater Project was well-documented in the 1999 Regional Wastewater Services Plan. The plan contained a comprehensive assessment of current capacity and future demand for wastewater services, and identified the need for a 36-million-gallon-per-day treatment plant to serve King and south Snohomish counties by 2010. The Wastewater Treatment Division also conducted a thorough analysis of alternatives to meet the long-term demand and county policy objectives. In addition, the division developed an extensive management implementation plan for the Brightwater Project and other wastewater facilities to ensure that the desired Regional Wastewater Services Plan objectives were achieved.

In support of the broad capital project objectives, developing and adhering to a mutually agreed upon project schedules is important to ensure timely delivery of capital projects to meet public demand. During the past five years, the county has focused on and made significant progress in more cost-effective capital project delivery. The county now has an opportunity to give greater attention to achieving more timely procurement and contracting processes. The local engineering firms were also very interested in reducing the administrative time and cost associated with developing county proposals and ongoing

contracting requirements, such as requesting the county's approval for staff changes that are often required during the life of a major capital project. A forum would be beneficial for county agencies and local firms to consider underlying problems that are barriers to effective and timely procurement and contracting processes.

**Best Practice: Examine
Public/Private
Solutions (Partially In
Practice)**

The Procurement and Contract Services Section, Wastewater Treatment Division, and other county agencies exchange best practice information with local design engineering firms and other public agencies, particularly other agencies in Washington State and local government. County agencies have also collaborated with both public and private sector partners in improving county procurement practices on an ad-hoc basis. Examples of effective collaborative efforts initiated at the consulting firms' request include teaming with other county agencies and external public and private agencies to conduct market research, and standardizing and streamlining procurement and contract requirements to reduce the county's and consulting firms' time and cost for preparing proposals. The Procurement and Contract Services Section also offers periodic scope, negotiation and cost analysis training, and technical assistance to county agencies to address internal issues.

Although these practices were effective, the county's collaborative efforts were constrained by limited resources and time. Broader discussion of potential policies or emerging initiatives, such as consulting performance evaluations or at-risk fees, could be achieved through the forums. The forums could also promote the vested interest of local firms in achieving solutions identified through a participatory process.

Best Practice: Develop Performance Work Statement or Statement of Objectives (In Practice)

The statement of work is one of two critical elements in the procurement process, and the county uses a comprehensive statement of work/scope of work approach in specifying design requirements, tasks, and expected outcomes. Detailed contract management requirements are also specified in the contracts. At the request of local firms, the Procurement and Contract Services Section and county agencies have worked cooperatively to provide more defined statements of work in requests for proposals to facilitate the development of responses. The statements of work and design requirements are consistent with or exceed federal and state standards to ensure that the county capital projects qualify for federal and state funding.

Even though the county adheres to accepted standards in developing scopes of work, local engineering firms have raised issues that an advisory forum could effectively address. For example, local firms have challenged the county requirements to develop detailed level of effort analyses at the proposal stage due to increased preparation time and costs. In addition, firms are concerned that the detail provided in the level of effort analysis allows the county to roughly estimate project costs even though state law requires public agencies to select the most qualified firm without regard to cost.

The county is interested in retaining the detailed level of analysis, because it allows for more comprehensive and timely comparative reviews of the proposed project approach, work hours and staffing. It also allows the county agencies to more readily identify a preferred approach based on design requirements and stated performance criteria.

The county's interest in obtaining level of effort analyses at the proposal stage was not unique. Two public agencies contacted during the audit survey not only required highly detailed scope

and level of effort information, but also required proposers to include cost data in sealed envelopes. The sealed envelope submitted by the most qualified firm was opened only after the selection process was complete. Sealed cost proposals from other firms were not opened unless the most qualified firm was later disqualified.

Engineering firms viewed the emerging ‘statement of objectives’ approach, which focuses on desired outcomes and results, more favorably. This approach offers the firms more flexibility in developing proposals, and promotes greater cooperation and timeliness, but provides less specificity than traditional proposals. The Washington State Department of Transportation utilizes a variation of the statement of objectives approach to collaboratively develop scopes of work for non-conventional (e.g., design-build) projects and pays a fee to the collaborating firms based on a percent of the estimated design cost.

Local consultants have also expressed interest in receiving compensation for developing proposals during the procurement phase for projects of the magnitude of the Brightwater Facilities. However, none of the surveyed public agencies compensated consultants for developing proposals for traditional design-bid-build projects. Nevertheless, both the county and local engineering firms have raised issues regarding the required level of effort analysis and associated costs that merit discussion in a forum with broader representation.

**Best Practice: Decide
How to Measure and
Manage Performance
(In Practice)**

The county generally complies with this best practice on a project level, and relies on in-house and private-sector expertise to design capital projects. County contracts contain detailed design requirements, as well as performance expectations in relation to stated project objectives. Project progress reports are required and closely monitored against contract milestones and

deliverables for each major capital project. Profits, bonuses and other incentives are also utilized in managing county design contracts.

**Best Practice: Select
the Right Contractor
(In Practice)**

Selecting the right consultant is one of two critical elements of an effective procurement process (the scope of work is the second), and the county has established a fair, competitive process for the selection of the right consultants and contractors. In selecting consultants, the county has also achieved a balance in selecting recognized consultants with substantial resources and expertise to deliver complex capital projects, along with subcontractors with less experience, but new ideas. In addition, county agencies work cooperatively in fulfilling broad public objectives (i.e., providing small business opportunities, promoting economic development, ensuring best project value for taxpayers and ratepayers, etc.) as well as project-specific objectives (functionality, durability, aesthetics, and cost) in consultant selection processes. The county has not yet developed a mechanism to evaluate consultants' past performance, however, that could inform selection decisions. (See next section on managing performance for more information.)

**Best Practice: Manage
Performance (Partially
In Practice)**

County agencies designate in-house project managers (as well as other independent private engineering consulting firms) to manage the performance of complex capital projects. Again, the contract terms and conditions identify the standards and expectations that the project managers use to manage performance, although adjustments and amendments may often be required to complete the project successfully.

As noted above, the county has not yet developed a process for evaluating consultants' performance even though consultants' performance in managing the contract is critical to the success of capital projects. Standard factors to consider in managing

consultant performance include management responsiveness, subcontract management, program/risk management, timeliness in completing project milestones and delivery schedules, and controlling project costs.

Awarding performance-based fees is an emerging, but not yet common, best practice that rewards consultants for achieving project efficiencies and minimizing costs. Generally, participating firms retain a minimum fee that is less than the standard, but can qualify for a higher, incentive-based fee. Although the performance-based fee could constructively resolve some compensation issues, the county would need to implement a formal consultant evaluation system to support the award of performance-based fees. Evaluating consultant qualifications for performance-based fees would require the county to develop clear goals and specifications to measure performance; a fee schedule based on level of success in meeting goals; a method for evaluating the design; and a protocol for resolving disputes.

In addition, the Procurement and Contract Services Section does not consistently receive information from agencies about project-level or consultant performance issues. Submitting periodic and post-project evaluations to the Procurement and Contract Services Section would be useful for all county agencies in making consultant selection decisions for future procurements. It also helps inform the county's Procurement and Contract Services Section of industry conditions to maintain an efficient and effective county procurement function.

RECOMMENDATION 6

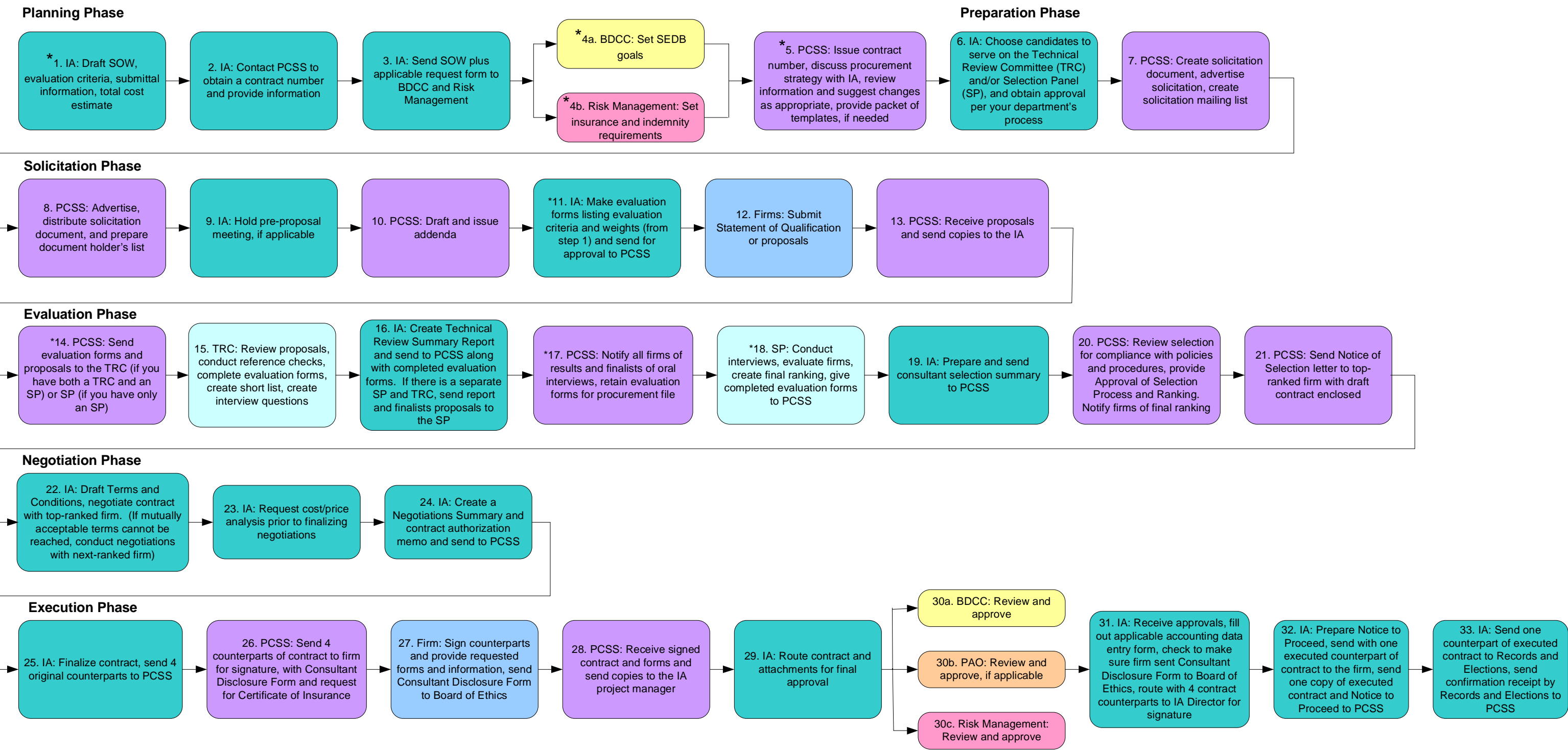
The Procurement and Contract Services Section, Wastewater Treatment Division, other county agencies, and local engineering firms should develop an advisory forum to address common efficiency, effectiveness and equity issues in the procurement

and contracting process. The forum should also be used to collaboratively develop formal performance standards to ensure accountability to county ratepayers, and to consider the merits of implementing best practices for continuous improvement of the county procurement and contracting process.

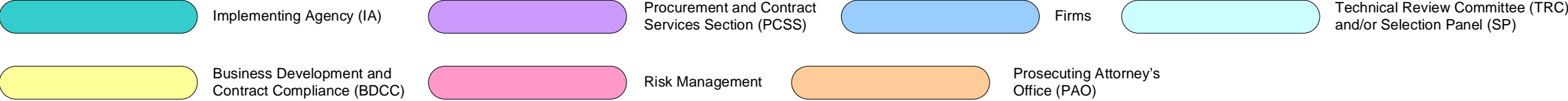
APPENDICES

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Professional Services Procurement and Contracting Process



Key:



*Starred steps MUST be done by designated organization

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APPENDIX 2

ENGINEERING CONSULTANT COMPENSATION RATES FOR SURVEYED AGENCIES

Agency	Low Estimate	Mid-Range Estimate	High Estimate
King County Water Treatment Division	\$121	\$165	\$215
Dallas, City of	125	150	175
Denver, City of	165	173	180
East Bay Municipal Utility District	126	176	225
Los Angeles Sanitation	150	188	225
Phoenix, City of	100	133	163
Portland, City of	121	164	205
Portland Clean Water Services	150	165	180
San Diego, City of	150	155	160
Seattle Public Utilities	130	148	165
Sound Transit	138	173	203
Washington State Dept. of Transportation	139	195	250
Average	135	165	195
<p>Source: King County Auditor's Office Engineering Consulting Compensation Survey, 2004.</p> <p>Note: The Cities of Phoenix and San Diego, Denver Metro, and Portland Clean Water Services do not offer employee or project bonuses. East Bay Municipal Utility District, Los Angeles Sanitation, the City of Dallas, and the City of Portland allow markups on subconsultant charges.</p>			

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APPENDIX 3

ADJUSTED ENGINEERING CONSULTANT COMPENSATION RATES FOR SURVEYED AGENCIES

We used data from the Bureau of Labor Statistics National Compensation Survey to adjust the compensation rates shown in Appendix 2 to account for regional differences in costs of living. The National Compensation Survey is one of many national indices used for regional cost-of-living comparisons, and was recommended by the King County Labor Relations Analysts.

Agency	Low Estimate (in Seattle Dollars)	Mid-Range Estimate (in Seattle Dollars)	High Estimate (in Seattle Dollars)
King County Water Treatment Division	\$121	\$165	\$215
Dallas, City of	121	145	169
Denver Metro Wastewater Reclamation District	156	164	170
East Bay Municipal Utility District (Oakland)	97	135	173
Los Angeles Sanitation	127	159	191
Phoenix, City of	105	140	172
Portland, City of	127	173	215
Portland Clean Water Services	158	173	189
San Diego, City of	139	144	149
Seattle Public Utilities	130	148	165
Sound Transit	138	173	203
Washington State Dept. of Transportation	139	195	250
Average	130	160	188
<p>Source: King County Auditor's Office Engineering Consulting Compensation Survey, 2004, and Bureau of Labor Statistics National Compensation Survey, 2004.</p> <p>Note: The Cities of Phoenix and San Diego, Denver Metro, and Portland Clean Water Services do not offer employee or project bonuses. East Bay Municipal Utility District, Los Angeles Sanitation, the City of Dallas, and the City of Portland allow markups on subconsultant charges.</p>			

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EXECUTIVE RESPONSE



King County

Ron Sims

King County Executive

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JUN 22 2005

KING COUNTY AUDITOR

June 22, 2005

Cheryle A. Broom
King County Auditor
Metropolitan King County Council

Dear Ms. Broom:

This letter and the enclosed table convey my official response to the Performance Audit regarding King County's procurement and contracting practices for the design of the Brightwater conveyance system. Let me begin by thanking you and your staff, as well as members of the Wastewater Treatment Division and the Finance and Business Operations Division, for the collaborative and professional approach taken in preparing this comprehensive audit.

The audit clearly indicates that during the past five years, the County has "substantially strengthened oversight of its procurement and contracting processes for professional engineering services." The strengthened oversight has led to improved cost control measures, enhanced cost accountability on projects, and resulted in more cost-effective design engineering services. The audit also acknowledges that the County is either fully or partially implementing all seven of the federal government's best management practices in procurement and contracting. I am pleased about these findings and believe the oversight measures and best practices have resulted in the best value projects for ratepayers and the general public.

Another noteworthy finding involves our rates for compensation. The County's rates for compensating consultants are consistent with those of the 11 surveyed public agencies, despite concerns expressed by members of the consulting community. Local engineering firms and consultants also continue to conduct business with King County, providing high quality, essential support to the ongoing business of the County. While the overriding conclusion is that our current rates are fair and reasonable, we will take additional steps to periodically assess our rates and ensure they remain competitive in the future.

Notwithstanding our past success, I acknowledge there is room for improvement. We need to improve our scheduling performance for contract procurement as measured by both internal standards and those of surveyed public agencies. We will improve procurement timeliness by developing better internal coordination in conjunction with the development of a schedule template and performance standards.



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and complies with the Americans with Disabilities Act*

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EXECUTIVE RESPONSE (Continued)

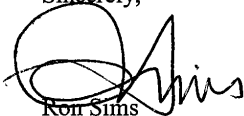
Cheryle A. Broom, King County Auditor
June 22, 2005
Page 2

The procurement and contracting process can be further enhanced by the County improving its communication with engineering firms and continuing with the implementation of best practices, especially those practices that promote adherence to agreed upon project schedules. In fact, County staff have been working intensively with representatives of the consulting community for several months to establish new contracting principles and an advisory committee, which are intended to improve communications and lead to collaborative improvements in the contracting process.

The enclosed table provides a specific response to each recommendation in the audit. I agree with each of the audit's recommendations and believe they will improve the efficiency of an already effective procurement and contracting process. We recognize that procurement is a critical part of successful project implementation and welcome any improvements that will help ensure successful delivery of our capital projects. I look forward to working with you and the King County Council in implementing these recommendations.

Please contact Ken Guy, Interim Finance Director, or Don Theiler, Wastewater Division Director if you have questions.

Sincerely,



Ron Sims
King County Executive

Enclosure

cc: King County Councilmembers
Kurt Triplett, Chief of Staff, Executive Office (EO)
Sheryl V. Whitney, Assistant County Executive, EO
Bob Cowan, Director, Office of Management and Budget
Paul Tanaka, County Administrative Officer, Department of Executive Services (DES)
Pam Bissonnette, Director, Department of Natural Resources and Parks, DNRP
Ken Guy, Interim Director, Finance and Business Operations Division, FBOD, DES
Donald Theiler, Division Director, Wastewater Treatment Division, WTD, DNRP
Christie True, Manager, Major Capital Improvements Section, WTD, DNRP
Kathy Loland, Program Management Services Supervisor, Major Capital Improvements Section, WTD, DNRP
David Leach, Manager, Procurement and Contract Services Section, FBOD, DES
Nora Huey, Contracts Supervisor, Professional and Construction Services, FBOD, DES
Wendy Keller, Project Control Officer, Professional and Construction Services, DES
Dave Lawson, Internal Audit Manager, Executive Audit Services

**Executive Response to:
Audit of Brightwater Procurement Practices**
June 22, 2005

Audit Recommendation (summarized)	Agency Position	Schedule for Implementation	Comments
1. Periodically assess reasonableness of compensation for design engineering services based on national salary surveys and best practices.	Concur.	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.	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."
2. Continue to refine procurement process schedule template and establish performance standards for timely procurement processes.	Concur.	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. 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.	

EXECUTIVE RESPONSE (Continued)

Executive Response to: Audit of Brightwater Procurement Practices June 22, 2005

Audit Recommendation (summarized)	Agency Position	Schedule for Implementation	Comments
3. Collaboratively establish project-specific procurement schedules.	Concur.	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.	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.
4. Achieve compliance with procurement schedules, with delays justified on the basis on significant or unique circumstances.	Concur.	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.	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.

EXECUTIVE RESPONSE (Continued)

Executive Response to: Audit of Brightwater Procurement Practices June 22, 2005

Audit Recommendation (summarized)	Agency Position	Schedule for Implementation	Comments
5. Ensure that project managers adhere to and document all key steps in the procurement process.	Concur.	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.	
6. Develop and advisory forum to address issues, develop performance standards, and assess the merits of emerging best practices.	Concur.	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 best practices. The advisory committee will be established in the second half of 2005.	Recent discussions with the consulting community has 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.

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LIST OF FINDINGS, RECOMMENDATIONS & IMPLEMENTATION SCHEDULE

Recommendation 1: The Procurement and Contract Services Section should continue to periodically assess the reasonableness of compensation for design engineering services based on national salary surveys and best practices. 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.

Implementation Date: 2006—The Procurement and Contract Services Section plans to hire an auditing firm in 2006 to review compensation and annual salary escalation factors for design engineering services.

Potential Impact: Continued assurance that design engineering costs are fair, and reflect the best value for county ratepayers and the general public.

Recommendation 2: The Procurement and Contract Services Section should continue to refine its procurement process schedule template that can be expanded or condensed based on the complexity of capital design projects, and establish performance standards for timely procurement processes. County agencies involved in capital project procurement should be given an opportunity to provide input on the schedule template and timeframes based on unique agency and project requirements.

Implementation Date: Second half of 2005—Procurement and Contract Services Section will convene an interdepartmental forum to discuss current practices and performance standards.

Potential Impact: Promote accountability to ratepayers and the general public through performance-based scheduling and timely implementation of capital improvement projects.

Recommendation 3: The Procurement and Contract Services Section should collaborate with the Wastewater Treatment Division and other county agencies to establish project-specific procurement schedules, consistent with overall capital project delivery objectives and established performance standards.

Implementation Date: Second half of 2005—Procurement and Contract Services Section will convene an interdepartmental forum to discuss current practices and performance standards.

Potential Impact: Ensure that capital project delivery objectives are met in a timely manner through collaboratively developed project-specific procurement schedules.

Recommendation 4: The Procurement and Contract Services Section and all county agencies should comply with the procurement schedules established at the onset of each procurement process to promote accountability to county ratepayers and taxpayers. Procurement schedule delays should be justified on the basis of significant or unique circumstances.

Implementation Date: Second half of 2005—Procurement and Contract Services Section will convene an interdepartmental forum, which will discuss scheduling benchmarks and how to measure and evaluate delays on specific projects.

LIST OF FINDINGS, RECOMMENDATIONS & IMPLEMENTATION SCHEDULE (Continued)

Potential Impact: Provide assurance to ratepayers and the general public that procurement delays that impact overall project delivery schedules are unavoidable, or appropriately documented if justified.

Recommendation 5: The Wastewater Treatment Division and other county agencies should consider adapting the existing county procurement checklists to ensure that project managers adhere to and document all key process steps that are not formally waived by agency management.

Implementation Date: Second half of 2005—Procurement and Contract Services Section will convene an interdepartmental forum, which will review the extent to which agencies are using compliance tools and recommend improvements or updates.

Potential Impact: Provides mechanism to promote countywide compliance with procurement policies and for the prompt resolution of related coordination and process issues.

Recommendation 6: The Procurement and Contract Services Section, Wastewater Treatment Division, other county agencies, and local engineering firms should develop an advisory forum to address common efficiency, effectiveness and equity issues in the procurement and contracting process. The forum should also be used to collaboratively develop formal performance standards to ensure accountability to county ratepayers, and to consider the merits of implementing best practices for continuous improvement of the county procurement and contracting process.

Implementation Date: Second half of 2005—the county has proposed to establish an ongoing advisory committee which would include representatives of the consulting community along with senior county management.

Potential Impact: Establishes forum for more proactive resolution of key issues and concerns, and for the consideration of best practices to enhance the efficiency and effectiveness of county procurement practices for design engineering services.

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