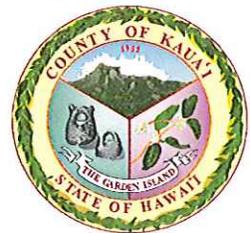


**FOLLOW-UP AUDIT OF THE COUNTY OF
KAUA'I BUILDING DIVISION,
DEPARTMENT OF PUBLIC WORKS**



Submitted by

Office of the County Auditor
County of Kaua'i
State of Hawai'i

Report No. 11-02
January 2012

PREFACE

This audit is a follow-up review of the county's responses to recommendations in the audit of the Department of Public Works' implementation of the Kīlauea Gym project.

We would like to thank all who contributed data to this report, especially the Managing Director, the Purchasing Division of the Department of Finance, and the Building Division of the Department of Public Works.

Ernesto G. Pasion, County Auditor

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EXECUTIVE SUMMARY

In this audit, we ascertained the county's responses to recommendations in the prior performance audit of the Building Division, Department of Public Works, which included reviewing certain activities, processes and procedures of the Kīlauea Gymnasium contract as a sample project. We also reviewed whether the conditions noted in the audit report as affecting the division's capacity to execute capital projects are the same or have changed, for better or worse.

We found that 56 of the 97 recommendations made by the audit report were implemented. (See, Appendix 1.)

We found that overall, the conditions noted in the prior audit as affecting the division's capacity to execute capital projects have worsened. They include weaknesses in the pre-bid, bid and contract documents, project policies and procedures, and division procedures and operations. The major reasons for the decline are:

1. The county continues to lose experienced employees. The building division has a significant (19 percent) vacancy rate. Since the last audit, the county has lost the equivalent of 116 years of county experience in the building division and the departments that support building activities.
2. The county has not implemented key audit recommendations. One recommends the county review and adopt standard (general) specifications, policies and procedures for construction projects. The county needs updated uniform standards and procedures for construction projects to reduce risk and control costs. Another recommends addressing staffing conditions that may contribute to communication and operational problems. The past audit and this audit include suggestions such as providing more technical training and

analyzing the effect on building division core functions before division personnel or positions are used or reallocated to projects outside their core functions.

CHAPTER 1

Introduction

This audit was conducted pursuant to the authority of the Office of the County Auditor, as provided in the Kaua‘i County Charter. The audit was included in the county auditor’s annual work plan for fiscal year 2010-2011, which was sent to the mayor and the Kaua‘i County Council in June 2010.

Background

This is one of three audits intended to provide an updated assessment of the current condition of the county’s management of capital projects. The audit addresses whether the county’s capital project execution noted in the prior audit of the Department of Public Works’ Kīlauea Gym project is the same or has changed, for better or worse. The second and third parts of the audit will examine two capital projects that have been completed or are being implemented by the county—the Kaiākea Fire Station and the road maintenance project for the fiscal year 2006-2007, Phase I. By examining these projects, we can obtain further insight into the county’s current contract and construction management of capital projects.

Audit Objectives

The objectives of the audit were to determine whether the recommendations of the prior audit of the public works department have been implemented, and if not, whether implementation is advised, by reviewing the feasibility of the recommendations, given county conditions and industry practices and standards.

Audit Scope and Methodology

The audit scope consisted of reviewing and evaluating the conditions noted in the Kīlauea Gym audit (about

weaknesses in the pre-bid, bid and contract documents, project policies and procedures, and division procedures and operations) to determine whether they still exist or have changed, for better or worse; and identifying the recommendations critical to the division's increased efficiency and effectiveness.

The audit was conducted by an external engineering consultant with experience in capital project planning and execution and staff from the county auditor's office.

We interviewed the chief of the building division, as the recommendations concerned his division. We issued a survey to the public works department to determine the status of the Kīlauea Gym audit recommendations. We reviewed personnel data about the division.

The audit was conducted from October 2010 through February 2011. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We transmitted the results of our review to the administration in a draft report.

Prior Audit

The prior performance audit of the building division was directed by the Kaua'i County Council through Resolution No. 2004-42. The audit reviewed certain activities, processes, and procedures of the Kīlauea Gymnasium contract as a sample project. The purpose of the audit was to provide an independent assessment of the building division's overall contract and construction management. The audit

was conducted by the accounting firm KMH LLP. The full audit report was issued on October 5, 2005.¹

The Summary of Findings for the audit concluded and found:

1. Pre-bid, bid and contract documents needed improvements to manage risk;
2. Project policies and procedures needed improvements to manage risk; and
3. Division procedures and operations needed improvements to manage risk.

About the Building Division

The building division is responsible for code enforcement, facility development, building construction and maintenance, and janitorial responsible for county facilities. When the division is assigned a capital project, such as facility development or building construction, it plans, designs, and manages construction of the project.

The building division has three sections, the administration, facility maintenance, and building code sections. The administration section has seven authorized positions, two permanent and five temporary. Three of those positions are vacant. The facility maintenance section has 49 authorized positions, 44 permanent FTEs and five part-time positions. Three of those positions are vacant. The building code enforcement section has 23 authorized positions, 18 permanent full-time FTE positions and 5 temporary positions. Six of those positions are vacant. The public works department reports that as of April 11, 2011, the division had 12 vacant positions, or an approximately 19 percent vacancy rate.

¹ The audit report can be viewed on the website of the Kaua'i County Auditor.

CHAPTER 2

AUDIT FINDINGS AND RECOMMENDATIONS

Finding 1. Of the 97 recommendations in the audit report, 56 (or 58 percent) have been implemented.

The audit included 97 recommendations to address the audit findings. The audit recommendations were grouped as follows: Pre-Bid and Bid Documents, Project Documents, Organization – Roles and Authority, Construction Management, and Division Operations. The disposition of the audit recommendations in each category are discussed below and summarized in Appendix 1.

Disposition of the recommendations was measured against the following audit criteria:

- Implemented - Department(s) or function(s) provided documentation confirming the recommendation's implementation, and or/we located necessary documentation using county and other resources
- Partially implemented – Department(s) or function(s) provided documentation confirming some, but not all, of the directives in the recommendation had been implemented
- Not implemented – Department(s) or function(s) failed to provide supporting documentation of implementation or other evidence to confirm the recommendation was implemented

Based on the definitions above, we found that of the 97 recommendations made by the audit report, 56 (or 58 percent) have been implemented. (See, Appendix 1.)

Although the gym audit report notes that the public works department dismisses most of the audit recommendations, many for valid reasons, the department should reconsider the recommendations for improvement endorsed by this follow-up audit.

The following sections discuss the recommendations, and identify those that appear to be more important to the division's capacity to execute capital projects. A table at the end of each section summarizes the important recommendations to implement and provides comments, as necessary.

Pre-Bid and Bid Documents

Seven recommendations were made in this category. Three have been implemented or partially implemented. We recommend implementation of one of the outstanding recommendations.

The building division has implemented the audit recommendations to solicit input from and utilize analyses by an engineer, contractor or manufacturer to assess risk and before eliminating a project component. The division uses licensed engineers to perform this function. The division has partially implemented the recommendation to adopt the new Construction Specification Institute document to serve as a specification writing standard, and uses this standard for architectural work. Although the audit recommended using this standard for all construction work, we agree with the division's response that the standard is not appropriate except for architectural work. Therefore, we consider this recommendation implemented.

We recommend implementation of one of the three remaining recommendations. The recommendation that should be considered for implementation is to modify and adopt the "Interim – General Provisions for Construction Contracts-County of Kauai" draft IV (October 5, 2001). We agree with the audit recommendation that the general

provisions should be a standard for construction projects. Therefore, all county units involved in construction should collaborate to review and develop the policy.

The audit recommends adapting the procurement process by securing a minimum of five bids for major building projects, eliminating the highest and lowest bidder, and mandating the use of the “Standard Questionnaire for Prospective Bidders on Public Works Contracts.” *We agree with the division that it should not implement these recommendations at this time.* The state procurement law does not allow the highest and lowest bidder to be eliminated outright, or require a minimum of five bids. As noted in the auditee response, the five bid minimum would also increase costs to the contractors and the county, since the project must be rebid if less than five bids are received. Projects may also be delayed if solicitations are repeated. We agree with the auditee that using the standard questionnaire should remain discretionary, as allowed by the procurement law. We recommend the county review and define when the questionnaire should be used. The county could also decide if the questionnaire is necessary, or if the procurement process already includes other safeguards for the county, such as requirements for professional licensing, performance and payment bonds, and tax clearances. We also agree with the auditee that the county must develop standards for reviewing the questionnaire responses before the questionnaire is made mandatory.

Summary of Important Recommendations to Implement

Recommendation (Pre-Bid and Bid Documents)	Status	Comments
Review, revise, and adopt “General Provisions for Construction Contracts-County of Kaua‘i.”	Interim version amended as required by changes in the law, but recommendation not fully implemented because of resources.	The county should consider devoting resources to develop an overall policy with the flexibility to adapt requirements based on project needs.

Project Documents

The division has fully implemented two of the six recommendations in this category. Three of the recommendations have been partially implemented. We include recommendations concerning the four recommendations that have not been fully implemented.

The division evokes the surety as a last resort when a contractor is terminated and factors a contingency into project budgets, as recommended by the audit. The average amount of the contingency is five percent. The division does not recognize the contingency as savings to the public works department or redirect the contingency to cover the division's budget shortfalls, as noted in the audit. This recommendation cannot be implemented by the building division, as it concerns budget policy and action by higher levels, including the county council.

The division has implemented the recommendation to ensure sufficient leeway in the contractor's schedule to allow for unforeseen delays. The building division reports that project time leeway is taken into consideration when setting contract time. The building division further addresses this recommendation by requiring performance schedules to be based on the critical path method (CPM). For large projects, the division could consider additional training for employees or using a contract specialist to improve the division's capacity to analyze schedules based on the CPM.

The division analyzes the impact of floats with respect to changes in the proposed completion dates by considering the impact of floats when reviewing the performance schedule (CPM), as recommended. For large projects, the division could consider further employee training or a contracted specialist to improve its capacity to perform float analyses.

The audit recommends accountability procedures for not adhering to project control communication requirements of the construction procedures manual. The division reports

incidents are handled on an issue-specific basis. We recommend that the division consider accountability procedures. The county engineer could also consider documenting, with specificity, each delegation or sub-delegation of his authority over decisions in major projects to increase accountability.

The division has not implemented the recommendation to adopt the “Interim – General Provisions for Construction Contracts-County of Kaua‘i ” draft IV (October 5, 2001). As stated in the section above, we encourage the administration to review, modify, and adopt a general standard for construction contracts.

The audit report also mentions adoption of the language in AIA form 101 regarding the date of commencement and substantial completion. Assuming the language is applicable, whether the language should be adopted may be a policy decision of countywide significance, to be made at a higher level. The adoption of appropriate language to address commencement and substantial completion dates and standards is beyond the division’s authority, and may have to be addressed across all political subdivisions of the State.

Summary of Important Recommendations to Implement

Recommendation (Project Documents)	Status	Comments
Establish accountability procedures for not adhering to Project Controls as outlined in the Construction Procedure Manual.	Implemented on issue-specific basis.	The county could consider including procedures and requirements for specific, written delegations of authority to establish accountability.
Review, revise, and adopt “General Provisions for Construction Contracts-County of	Interim version amended as required by changes in the law, but	The county should consider devoting resources to develop an overall policy with the flexibility

Kaua‘i.”	recommendation not fully implemented.	to adapt requirements based on project needs.
Construction manager should ensure there is sufficient project time leeway built into the contractor’s schedule to allow for possible unforeseen activity delays.	Considered in setting contract time.	Additional resources may be necessary to increase the county’s scheduling capability, including additional employee training or outside expertise for major projects.
Construction manager should perform an analysis relating to the impact of floats with respect to the change on the proposed completion date	Considered in critical path review.	Additional resources may be necessary to increase the county’s ability to perform reviews, including additional employee training or contract with specialist in float analysis and CPM scheduling for large jobs.

Organization – Roles and Authority

The building division has implemented nine of the 12 audit recommendations in this category. We recommend the division consider the remaining three.

The division has not implemented the recommendations to create a multi-departmental team to increase contractor monitoring early in the capital project to assist with issues that may arise with major projects and use outside expertise to review contract documents and develop schedules. We encourage the public works department and the administration to provide a multi-departmental team to support the division with complex projects. The audit recommends a team consisting of the deputy county engineer and deputy county attorney, but team members could also

come from the purchasing division of the finance department. The audit also recommends that the public works department realistically review the internal resources assigned to projects, instead of straining internal resources. The department should consider specialized or additional expertise when needed. For example, if internal expertise in specialty areas such as scheduling or claims does not exist, the expertise could be procured through an open-ended contract, and shared among the major county projects.

Summary of Important Recommendations to Implement

Recommendation (Organization – Roles and Authority)	Status	Comments
Early in the process for major projects, establish team (other departmental personnel, deputy county engineer and attorney) to deal with project issues.	Not implemented.	The team approach might be necessary for complex projects, but implementation requires the cooperation of the other departments and divisions.
Consider using outside consulting to assist in initial estimate of project budget, for review of contract document, and to establish a feasible working schedule. (Two recommendations.)	Not implemented.	The county may need to review internal resources, and consider procuring specialized outside expertise when using internal resources is not feasible.

Construction Management

The building division reports it has implemented 26 of the 33 recommendations in this category. The division should consider implementing four of the remaining recommendations.

The building division has not implemented the audit recommendations to review the contractor’s safety program.

We recommend that the division review the contractor's program for ensuring *public safety* during construction. However, reviewing the contractor's *employee* program may create additional liability for the county. Since a contractor is responsible for its own employees, the division should ask the county attorney's office whether additional liability for the county would result if the division approves a contractor's employee safety program.

The audit suggests a management system could enable the contractor and the county to record the actual progress of the project and project costs against detailed project schedules and preliminary cost estimates established prior to construction, and to inform the contractor and the county about construction activity during the project. While we agree a management system has benefits, the system proposed by the audit has practical constraints. First, for a system to work, the firm or person performing the design work must be able to produce schedules with sufficient detail to enable step-by-step time and cost comparisons. To obtain the necessary detail, the county may have to consider procuring additional scheduling expertise, if economically feasible. The second practical constraint is the state procurement law. The audit recommendation concerning the value of a management system assumes that if significant variances in schedule or cost are detected, cost increases can be moderated or avoided by alternate solutions to approach or schedules. We agree with the auditee that alternate solutions and schedules may not be permitted by the state procurement law after an award is made. The county is considering a project information system, which is a good first step towards more effective project management.

The building division does not maintain a record copy of all contract documents at the construction site, as recommended by the audit. Implementation of this recommendation is appropriate only for projects with a secure and fire-proof site office.

Summary of Important Recommendations to Implement

Recommendation (Construction Management)	Status	Comments
Review the safety program developed by the contractor as required by the contract documents.	Not implemented.	The review could be confined to the components to protect safety of the public. The county attorney should be consulted about the liability impacts of reviewing contractor employee safety components.
Record the progress of the project in written project reports including information relating to the contractor and the overall project itself showing percentage of completion, number and amount of change orders, notification of delays, approval of extensions, and daily log. (Three recommendations)	Not implemented.	An information system is under consideration. If feasible, a formalized management system could also be considered.

Division Operations

Thirteen of the recommendations in this category were implemented, 23 were not implemented, and no responses were provided for the remaining three.

Two recommendations in this category relating to improvements in internal communication have been implemented, and four have not. Two of the four relate to internal communication between the county engineer and the project managers, and the work load problems that may

occur when a major project is assigned to the building division head. We recommend that the public works department continue to address the recommendations to improve internal communication.

The two remaining recommendations encourage the county to implement a web-based system for internal and external communication about projects. The managing director has stated that the county is working on a web-based project information system. We recommend the administration incorporate the audit observations in the audit into system development.

None of the six audit recommendations concerning division staffing has been addressed. Staffing continues to be a challenge for the building division, as shown by its April 2011 vacancy rate of 19 percent. Like the rest of the county, the division may face staffing challenges as the baby boomers retire. A 2008 study by former mayor Baptiste found that 32 percent of county employees will be retirement-eligible by 2013. We recommend the administration consider implementing the audit recommendations related to staffing for the entire county organization.

Five of eight audit recommendations concerning equipment procurement have been addressed. In its response to the audit, the division states that the other concerns in the audit about equipment have been addressed or are unfounded.

The outstanding audit recommendations are intended to promote operational cohesiveness within project groups, the division, and the department and should be considered as the public works department develops its annual budgets, to the extent possible.

Four of five recommendations about employee training have not been implemented. One concerns the need for policies, procedures, and other basics tools for performing accurate field inspections. This recommendation should be

considered for all county inspections, with components for the different types of inspections. The remaining audit recommendations emphasize the critical need for training to enable employees to accurately record, document, and report issues involved in public and private construction projects. Although training budgets may have been reduced, additional training may prevent costly future problems.

In the category of “Building Division Enhancements,” the division should address the recommendation that it provide employees computer training so their skills are similar to equivalent positions in the market.

Some recommendations require action by county officials outside the division. They are to: (1) create a new position or group that would address contract monitoring and inspection of major county and commercial projects, (2) create a new position to manage the construction process, (3) increase staff and equipment, and (4) assign zoning issues to the building division plan examiners. Although these recommendations have not been implemented, they are not included as outstanding recommendations because they require policy decisions by others, such as the county engineer, mayor, and county council.

Summary of Important Recommendations to Implement

Recommendation (Division Procedures and Operations)	Status	Comments
Set up network of internal communications and work order system.	Not implemented.	A project information system is under consideration, and it could include access to website information for employees.
Post building codes and regulations on website.	Not implemented.	The department could consider adding more information for the public on its website.

Address immediate staffing needs by targeted recruitment, mentoring and formal training of new-hire personnel with advancement capability.	Not implemented.	Recruitment and advancement issues are countywide, and program should be addressed centrally for all departments with critical shortages.
In-house and student recruitment with the goal of awareness of county activities and creating a database of potential job applicants.	Not implemented.	Recruitment and advancement issues are countywide, and should be addressed centrally for all departments with critical shortages.
Promote job opportunities in construction, maintenance, and administration. Marketing plan to promote awareness of using job skills in the county.	Not implemented.	Recruitment and advancement issues are countywide, and program should be addressed centrally for all departments with critical shortages.
Provide specific training for code enforcement personnel in understanding compliance to major construction safety programs where general contractors are responsible for such a project.	Not implemented.	Training may improve awareness and mitigate risk.
Develop policies and procedures and the basics for performing an accurate field inspection, provide training.	Not implemented.	This component is very important for all county field inspectors.
Provide specific training in the means of recording and documenting issues and/or problems relating to public	Not implemented.	This component is very important for all county field inspectors.

facilities and commercial and/or residential projects being constructed.		
Develop procedures for reporting and notifying supervisory personnel relating to issues or problems encountered during project inspections due to code violations, testing, non-conformance with contract documents including plans and specifications, etc.	Not implemented.	Very important component for all inspectors.
Initiate a plan for the required training of all building division personnel relating to basic computer principles, applications and uses based on current technology in use by industries in the marketplace for operations and reporting purposes.	Not implemented.	Consider implementing, if not cost prohibitive or time-consuming.

Finding 2. Conditions noted in the prior audit have changed for the worse.

After reviewing and evaluating the conditions noted in the Kīlauea Gym audit (about weaknesses in the pre-bid, bid and contract documents, project policies and procedures, and division procedures and operations), we conclude that conditions have changed for the worse, for the reasons we discuss below.

- a. The county’s capacity to execute capital projects has decreased since the audit.**

The county has recently been successful developing a large-scale, complex public facility (the Kaiākea Fire Station) ahead of schedule and within budget; however, the resources available to execute county capital projects continue to diminish.

The building division’s resources are thin. As of April 2011, the division’s vacancy rate was high, approximately 19 percent. The gym audit noted that the combined base of county experience in the building division and the departments that support building activities totaled 250 years, and characterized that experience as “beyond reproach.” This situation does not exist today. Since the audit, the equivalent of 116 years of the 250 years has been lost.

Expertise Lost	Time with county	Time in position
Purchasing & Contracts Administrator	20 years	15 years
Code Enforcement Coordinator (Officer)	31 years	18 years
Supervisor (Supervising) Plans Examiner	32 years	10 years
Repair (Construction) & Maintenance Supervisor	33 years	15 years
Total Experience Lost:	116 years	58 years

b. The county has not implemented key audit recommendations.

The county has not reviewed and adopted standard (general) specifications, policies and procedures for construction projects. In its response to the prior audit, the county administration stated that it could not devote the time and effort needed to update and amend existing standards of policy and procedure because of the vacancy in the assistant chief procurement officer position and staff shortages. Without standards for key practices, the county’s exposure to risk in executing and implementing capital projects will continue. In an environment where

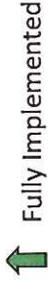
employee turnover is high, the development and adoption of standard practices is essential, since replacement employees are normally less experienced and require more guidance.

The county has not addressed staffing conditions identified in the audit. The audit noted that immediate attention is required to address staffing in two areas. The first is the significant gap in county experience between the group leaders in the building and other divisions and upper management in public works, and between the group leaders and their less-experienced subordinates. The gap between the policy makers and group leaders has increased, since the administrative assistant to the mayor for capital projects and the newly appointed county engineer and deputy county engineer have far less experience with municipal capital projects than the group leaders of the building and engineering divisions. The second staffing issue is the lack of personnel in the building division to support county activities. The audit noted that operational and managerial problems may occur when internal or existing resources (personnel) are assigned major construction projects without analyzing whether the employee(s) can adequately perform normal job functions and the day-to-day management of major construction at the same time. In these difficult economic times, the public works department may choose to use internal resources for capital projects because internal resources appear to cost less, but such decisions should be supported by the appropriate cost-benefit analyses. Similarly, before the administration or department considers reallocating resources, personnel or positions in the building division to other divisions or departments, they should consider the effect of the reallocation on the building division's ability to perform its core functions.

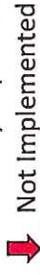
AUDITEE RESPONSE TO FINDINGS

No response was received from the auditee by the extended deadline.

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS



P Partially implemented



Description of Recommendation	Currently Performing?		Comments
	Yes	No	
PRE-BID AND BID DOCUMENTS			
Standard Specifications for Public Works Construction			
<ul style="list-style-type: none"> Implement the new CSI document to serve as the specifications-writing standard for the county-share document with contractors. 	P		Partial. Architectural work-civil work not.
<ul style="list-style-type: none"> In projects where changes are to be instituted that could effect the structural integrity of the facility, is an engineering analysis performed first to determine the potential risk of such decisions? 			
<ul style="list-style-type: none"> Is a qualified contractor and/or manufacturer providing input to the analysis? 	P		Partial. Work is being done by licensed engineers.
<ul style="list-style-type: none"> Are the results and facts then considered before eliminating a component due to budget constraints? 			
General Provision of Construction Contracts			
<ul style="list-style-type: none"> Has "Interim - General Provisions For Construction Contracts-County of Kauai" - Draft IV, dated October 5, 2001 become a standard of policy and procedures for addressing the general provisions of building and other major projects contracted by the DPW? 			
<ul style="list-style-type: none"> Secure a minimum of five bids for major building projects. 			(Noted in auditee response)
<ul style="list-style-type: none"> Has the "Standard Questionnaire for Prospective Bidders on Public Works Contracts" been implemented? 			
PROJECT DOCUMENTS			
Contract-Stipulated (Lump) Sum (Fixed Price)			
<ul style="list-style-type: none"> If the contractor must be terminated because the county will be damaged by the inability to obtain full use of the completed work, upon exhausting all other means and methods to resolving the issue/correcting the work, would or has the county then exercised the right to evoke the surety? 			

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
Contingency			
• Are contingencies factored into your project budgets? What is the average amount budgeted?	↑		5%
Project Controls			
What accountability procedures for not adhering to the Project Controls			
• Communication Section as outlined in the Construction Procedure Manual are in place?	P		Partial. Issue specific.
• Review and approve Interim-General Provisions for Construction Contracts-County of Kaua'i.		↓	
How does the county construction manager ensure that there is sufficient project time leeway built into the contractor's schedule to allow for possible unforeseen activity delays?	P		Partial. Setting contract time.
• Does the county CM perform an analysis relating to the impact of floats w/respect to any changes on the proposed completion date?	P		Partial. Review CP
ORGANIZATION - ROLES AND AUTHORITY			
• For major projects is a county project/construction manager designated and assigned through completion?	↑		
• Does the CM monitor compliance with the county codes and regulations, contract documents, and plans and specifications?	↑		
• Is the reporting process and field activities of the contractor(s) closely monitored by the county's CM?	↑		
• Are detailed and accurate minutes of discussions during weekly meetings recorded, then tracked, relating to project issues in order to mitigate future project risks?	↑		
• Are meeting minute action items used to address project issues raised and discussed in meetings?	↑		
• In conjunction with the weekly reporting process relating to tracking and monitoring project issues, are communications forwarded to the applicable division and department heads as a notification of such issues?	↑		
• Do the division and department heads provide input to the solutions of such issues?	↑		

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Early in the construction contract administration and management process for a specific major project, is teaming (on an information basis with other division and department personnel, such as the deputy county engineer and a deputy county attorney) established to assist with issues that might arise during the project? 		↓	
<ul style="list-style-type: none"> For major county construction projects, is outside consulting used to assist in the initial estimate of the project budget? 	↑		
<ul style="list-style-type: none"> Is outside consulting used for the review of contract documents to be issued for construction? 		↓	
<ul style="list-style-type: none"> Is outside consulting used for the development of a schedule to be used in benchmarking the contractor's schedule during the pre-bid phase? 		↓	
<ul style="list-style-type: none"> For those items marked yes on this page, are procedures documented and followed routinely from project-to-project? 	↑		
CONSTRUCTION MANAGEMENT			
Preconstruction			
<i>W/architect's assistance (whether an internal or external source is used by the county for architectural services), does the CM provide the following:</i>			
<ul style="list-style-type: none"> Preliminary estimates of construction cost for early schematic designs based on area, volume or other standards to achieve an agreed upon project budget and to provide cost evaluations of alternate materials and systems? 		↓	
<ul style="list-style-type: none"> Advice during design for on site use and improvements, selection of materials, building systems and equipment? 	↑		
<ul style="list-style-type: none"> Recommendations on the relative feasibility of construction methods, availability of materials, labor, and time requirements for procurement, installation and construction? 	↑		
<ul style="list-style-type: none"> A detailed project schedule, which includes roles and responsibilities for the team, for review by the proper department and division heads? 		↓	
<ul style="list-style-type: none"> Coordination of the contract documents, with the proper department and division heads, as they relate to drawings and specifications? 	↑		

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Recommendations of alternate solutions whenever design details affect construction feasibility, cost or schedules? 	↑		
<ul style="list-style-type: none"> Review of the contractor's construction schedule, including all major elements such as phasing of construction, times of commencement, and completion? 	↑		
Construction			
<i>Commencing with the award of the construction contract, does the construction manager provide the administration of the construction contract and the management of the project through the following service:</i>			
<ul style="list-style-type: none"> Provide administrative, management and related services to coordinate the work of the contractor with the county's objectives for cost, time, and quality. 	↑		
<ul style="list-style-type: none"> Schedule and conduct pre-construction, construction, and progress meetings to discuss procedures, progress, problems and scheduling. 	↑		
<ul style="list-style-type: none"> Review the updated project construction schedule whenever submitted by the contractor. 	↑		
<ul style="list-style-type: none"> Endeavour to achieve satisfactory performance from the contractor and recommend courses of action if the performance is not satisfactory. 	↑		
<ul style="list-style-type: none"> Revise and refine the approved estimate of construction cost incorporating approved changes as they occur in addition to developing cash flow and forecasts as needed. 	↑		
<ul style="list-style-type: none"> Provide regular monitoring of the approved estimate of construction cost showing actual costs for activities in progress. 		↓	
<ul style="list-style-type: none"> Provide estimates for uncompleted tasks plus identifying variances between actual and budgeted costs. 		↓	
<ul style="list-style-type: none"> Notify the proper county personnel when actual costs exceed budgeted or estimated costs. 	↑		
<ul style="list-style-type: none"> Develop and implement procedures for the review and processing of payment applications by the contractor for both progress and final payments. 	↑		
<ul style="list-style-type: none"> Review the safety program developed by the contractor as required by the contract documents. 		↓	

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Coordinate the initial permit process plus assisting the contractor in obtaining any special permits required for the project. 	↑		
<ul style="list-style-type: none"> If required, assist in selecting and retaining the services of surveyors, special consultants, and testing laboratories. 	↑		
<ul style="list-style-type: none"> Determine in general that the work being performed by the contractor is being performed in accordance with the requirements of the contract documents, guarding the county against defects and deficiencies in the work? 	↑		
<ul style="list-style-type: none"> Require special inspections or testing of work not in accordance with the contract documents whether the work has already been fabricated, installed or completed. 	↑		
<ul style="list-style-type: none"> Respond to contractor requests, interpret the meaning and intent of the construction drawings and specifications, and assist in the resolution of such questions. 	↑		
<ul style="list-style-type: none"> Receive the certificates of insurance from the contractor and maintain a file copy of such for the county. 	↑		
<ul style="list-style-type: none"> Receive from the contractor and review all shop drawings, product data, samples and other submittals and transmit to the designer those recommended for approval. 	↑		
<ul style="list-style-type: none"> Establish and implement procedures for expediting approved drawings and other submittals on approval. 	↑		
<ul style="list-style-type: none"> Record the progress of the project in written reports including information relating to the contractor and the overall project itself showing percentage of completion and the number and amount of change orders, the notification of delays from the contractor and the approval for extensions to the schedule. 		↓	
<ul style="list-style-type: none"> Establish and implement a daily log containing a record of weather, contractor's activities on the site, number of workers, work accomplished, and problems encountered. 	↑		
<ul style="list-style-type: none"> Maintain at the construction site, on a current basis, a record copy of all contract documents including drawings, specifications, addenda, change orders and other modifications. 		↓	

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Observe the contractor's checkout of utilities, operational systems and equipment for readiness, and assist in the initial start-up and testing. 	↑		
<ul style="list-style-type: none"> Upon consideration of the contractor's work, or a designated portion of the work substantially complete, prepare for the designer a list of incomplete or unsatisfactory items and a schedule for the completion or correction of such. 	↑		
<ul style="list-style-type: none"> Assist the designer in conducting inspections for substantial completion and coordinate the correction and completion of the work. 	↑		
<ul style="list-style-type: none"> When work is ready for final inspection, assist designer in conducting final inspection, securing and transmitting required guarantees, affidavits, releases, bonds and waivers, plus collect all keys, manuals, record drawings and maintenance stocks. 	↑		
<ul style="list-style-type: none"> For those items marked yes on this page, are procedures documented and followed routinely from project-to-project? 	↑		
DIVISION OPERATIONS			
Internal Communications			
<ul style="list-style-type: none"> Is the leadership conducting weekly meetings for the purpose of discussing scheduling, equipment, manpower, and health and safety in the workplace, OSHA standards for field operations, and community awareness of projects being performed in the field? 	P		Partial. Periodic.
<ul style="list-style-type: none"> Is the leadership conducting follow up meetings to address the issues discussed in weekly Division meetings? 		↓	
<ul style="list-style-type: none"> Is the head of the division conducting meetings at least once every two weeks to discuss issues brought to attention, and resulting from, the section meetings in addition to discussing certain elements of meetings with the county engineer that could affect or include a DPW division or its sections? 		↓	
<ul style="list-style-type: none"> Is the county engineer conducting a meeting at least once a month with all of the various division leaders to discuss current issues or problems involving scheduling, equipment, manpower and the sharing of resources? 			Auditee did not respond yes or no.

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Does the county engineer discuss certain elements of division leader meetings with the county council that could affect or include DPW divisions or its sections? 	↑		
<ul style="list-style-type: none"> Has a network of internal communications through use of computer generated e-mails, and electronic memorandums been established? 	↑		
<ul style="list-style-type: none"> Is there a web-based system established wherein the staff can exchange ideas relative to projects, staffing, scheduling, new technology, training, codes and regulations, community issues, administration & county council news, etc. been set up? 		↓	
<ul style="list-style-type: none"> Has an internal work-order system been established that is shared by all operating divisions which relates to both public facilities and other county projects that contains information relative to scheduling, equipment status, completion of activities/inspections and field assignments, including the dates of completion, and if not completed, the status of such including a revised date of completion plus the number of work orders completed to date for a specified period, a comment section that is project specific and other information relative to sharing information beneficial to the field activities of the department divisions? 	↑		
<ul style="list-style-type: none"> Has a website accessible by division personnel and the public been established to further the idea of community awareness and to support the needs of the county personnel? 		↓	
Staffing			
<i>In consideration of the above, best practices suggested addressing the issue of staffing needs. Have these been done:</i>			
<ul style="list-style-type: none"> have the ability to learn and advance over time to supervisory and management positions within the department's division sections. 		↓	
<ul style="list-style-type: none"> An overall promotion of the opportunities available for both skilled workers and young persons seeking a sound and stable vocation in construction, maintenance, and administration. 		↓	

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> A public relations effort directed at a community awareness of the inner-workings of the department of public works. <i>To accomplish the suggested best practices for staffing, has the following been addressed:</i> 		➔	
<ul style="list-style-type: none"> An in-house recruitment plan and process directed at the University of Hawaii, the local high schools, and the existing work force through presentations at the schools, meetings with civic and business organizations, and interviews and discussions with the local media, with the goal being an awareness of the vast and different activities of the county in addition to creating of a data base of prospective candidates for employment to fill available positions as the need arises. 		➔	
<ul style="list-style-type: none"> A marketing plan to promote an awareness of the application of one's learned skills to the work activities of the county while identifying the opportunities and benefits available through a position in the county's department of public works and the various divisions within the department. 		➔	
<ul style="list-style-type: none"> Promoting an idea of a direct involvement in the planning and future of the community in which they live and work. 		➔	
Equipment Procurement/Equipment			
<p><i>Relating to the budget process for firms and businesses that have multiple operating divisions within a department, best practices recommends operational cohesiveness and communications between the various groups within a division, between the divisions themselves, and finally with the department. Have the following recommendations relating to the budget process been addressed:</i></p>			
<ul style="list-style-type: none"> An initial meeting(s) conducted by the Section leaders with the field supervisors to discuss the operating needs relating to vehicles and equipment. 		➔	
<ul style="list-style-type: none"> During these meetings the condition of existing equipment is assessed, current workloads are identified, and future equipment needs are determined based on historical trends and resulting anticipated workloads. 		➔	

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Based on the information from the initial meeting(s), each of the section leaders prepare a sound budget that is submitted to the division head at a budget-planning meeting during which the budget is reviewed, discussed, adjusted and approved. 		↓	
<ul style="list-style-type: none"> For these first two phases of the budget process and during the planning and review meeting(s), the section leaders as well as the division head work closely with the individual responsible for reviewing internal department budgets in promoting a sound and reasonable budget. 	↑		
<ul style="list-style-type: none"> Upon approval of the budgets by all of the division heads, a review and approval meeting is conducted by the department with all of the division heads in attendance to openly discuss the various needs as presented in each of the division operating budgets. 	↑		
<ul style="list-style-type: none"> The fiscal management officer is in attendance to discuss the budgets and to provide information relative to any insight available concerning the administration's anticipation of the current year's budget. 	↑		
<ul style="list-style-type: none"> Upon approval of the budgets by the county, and in consideration of any adjustments recommended and made by the administration, the county engineer meets with the division leaders to discuss the approved budgets including adjustments as well as the procurement of the approved items requested by each of the divisions. 	↑		
<ul style="list-style-type: none"> The county engineer holds firm on allocating the approved equipment to the specific division that made the request. 	↑		
Training			
<p><i>In consideration of the above, best practices suggest addressing training as a top priority that includes periodic internal training seminars for all division personnel relating to OSHA, safety and health, general field operations, and in-house/work-place safety applications. In addition, specific training geared towards personnel within code enforcement is recommended. Is training available for staff in the following areas:</i></p>			

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<ul style="list-style-type: none"> Understanding compliance to major construction project safety programs where general contractors are responsible for such a project. 		↓	
<ul style="list-style-type: none"> Policy and procedures and the basics for performing an accurate field inspection. 		↓	
<ul style="list-style-type: none"> Proper means of code enforcement including the use of applicable forms for addressing issues at a project site. 	↑		
<ul style="list-style-type: none"> Means of recording and documenting issues and/or problems relating to public facilities and commercial and/or residential projects being constructed. 		↓	
<ul style="list-style-type: none"> Procedures for reporting and notifying supervisory personnel relating to issues and/or problems encountered during project inspections due to code violations, testing, non-conformance with contract documents including plans and specifications, etc. 		↓	
<p>Building Division Enhancements - <i>to be answered only by Buildings</i></p> <p><i>In alignment with normal best practices for municipalities, the following were recommendations to be considered as improvements to operations:</i></p> <p><i>Have they been addressed?</i></p>			
<ul style="list-style-type: none"> Implement either a new position, or new group, within the code enforcement section that would specifically address the contract monitoring and inspection of both new county major construction projects as well as commercial construction projects. This recommendation would replace the current practice of inspection procedures that require an inspection of certain systems or components of the project as requested by the contractor. 		↓	
<ul style="list-style-type: none"> Established as a scheduled weekly activity of ongoing projects within the county, contract monitoring that involves a review of the installation of the building systems and components in accordance with the plans, specifications and contract documents. 	↑		
<ul style="list-style-type: none"> Established as a scheduled weekly activity of ongoing projects within the county, inspection that encompasses compliance with building codes and regulations. 		↓	

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<p>Not meant to replace a construction management position, the intent of the new position would be to more closely monitor the overall construction process to mitigate risk and diminish possible delays due to faulty construction, misinterpretation of construction drawing and/or building specifications, failure to apply addenda, and installation of alternate system and components based on a request for change but prior to the approval of the change request.</p> <ul style="list-style-type: none"> 			
<p>Though not replacing a construction manager position, the experience of the professional(s) filling this position would be based on previous construction project management expertise, the ability to read and understand construction building plans and interpret building specifications, familiarization with construction scheduling, complete knowledge and understanding of the building codes and regulations, and an understanding of building construction including those systems and components that comprise the building structure.</p> <ul style="list-style-type: none"> 			
<p>According to information provided by the county, funding levels for the building division over the past three years (through 7/1/05) has not increased significantly.</p> <ul style="list-style-type: none"> Over that period the budget increase for personnel as well as non-personnel items was less than 10% (not including the revolving fund). This being the case, and to assist in addressing various needs for additional staffing and equipment as discussed throughout the "Divisional Operations" section of this report, the division should consider the use of the funds available through the revolving fund. 			Auditee did not respond yes or no.

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<p>Adopted on March 31, 1999, Ordinance No. 733 established the Plan Review, Permit Processing and Inspection Revolving Fund. The fund may be used to hire persons to assist in plan checking, permit processing and inspections as well as for the cost of materials, supplies and equipment that facilitate plan review, permit processing and inspections. In determining the operating budget for the building division, the building superintendent and the section leadership should apply the use of such funding, which is independent of the division operating budget, to specifically address the need for additional staffing in the code enforcement section.</p>			
<p>The use of the revolving fund for meeting the staffing shortages might allow the division the flexibility to better address their equipment needs more in line with the overall department's expectations for operating budgets. For the building division, this result could put forth a higher probability of being allocated the cost of such new equipment including vehicles and off-road equipment.</p>			
<p>Allow the building division to contract the construction of major county projects to either outside contractors or to other divisions within the department capable of performing the construction, which would include the architectural design and engineering, construction, and construction management. Generally such an option is not normally exercised. This subcontracting of major county projects would not alleviate the building division's responsibility of normal building inspections for such projects.</p>			
<p>As a result of the building division plans' examiner(s) review and familiarization of and with the construction drawings for new county major building projects, the current job position and description for the plans' examiner should include the responsibility of handling all zoning issues, which is currently undertaken by the building inspectors. Likewise, under the exchange of such responsibilities, the building inspectors would be responsible for the issuance of building permits currently under the role of the plans' examiner.</p>			

SUMMARY OF RESPONSES TO QUESTIONNAIRE REGARDING IMPLEMENTATION STATUS

Description of Recommendation	Currently Performing?		Comments
	Yes	No	
<p>Since computer training classes are budgeted by the county, the building division, through the support of the county engineer, should initiate a plan for the required training of all building division operations' personnel relating to basic computer principles, applications and use so as to allow the division to keep in step with all industries in the market place, most of which are using current computer technology and applications for operations and reporting purposes.</p>			

-  Fully implemented
- P Partially implemented
-  Not implemented