

LONG BEACH COMMUNITY COLLEGE DISTRICT

**Construction Bond Measure E
Performance Audit Report**

**For the Fiscal Year Ended
June 30, 2004**

January 11, 2004

Board of Trustees
Long Beach Community College District
Long Beach, California

This report summarizes the results of our engagement to provide Measure E performance audit services as required by California Proposition 39 for the fiscal year ended June 30, 2004. This performance audit evaluated the processes and controls needed to achieve construction program cost, scope and schedule goals established by the bond measure, and to provide commentary on factors which affect the facilities improvements on the two campuses of Long Beach City College, within the Long Beach Community College District (District). Good practices and improvement opportunities, as identified at the time of report issuance, are identified in this report.

This engagement was performed in accordance with Standards for Consulting Services established by the American Institute of Certified Public Accountants as outlined in our engagement letter dated October 13, 2004. The scope of this engagement is outlined in the body of our report. Our report was developed based on information from our interviews with District employees and our testing and analysis of facilities improvement program documentation.

This report is intended solely for the use of District Administration, the Bond Citizens' Oversight Committee and the College Board of Trustees (Board). Moss Adams LLP does not accept any responsibility to any other party to whom this report may be shown or into whose hands it may come.

We would like to express our appreciation to you and all members of your staff for your cooperation throughout our review. Please call Curtis Matthews at (503) 704-6943 if you have any questions regarding this report.

Very truly yours,



**Long Beach Community College District
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Objectives and Scope

This performance audit evaluated the Bond Program compliance, effectiveness, program performance controls and efficiency. We have evaluated whether an appropriate control structure has been developed for implementation of the Measure E Construction Bond Program. We have also tested the current year's expenditures for compliance with Bond Program objectives.

Our performance audit team has validated construction program expenditures and analyzed program level controls. We have conducted in-depth interviews and reviewed key program documentation including a draft copy of the Facilities Master Plan, District Measure E Bond Program Policies and Procedures, the Bovis Program Management Plan, and evaluated policies and procedures as put in practice by both the District and the Bovis Program Management Team.

A sampling of other Bond Program documents reviewed includes:

- Voter materials and bond documents
- Facilities planning documentation
- Procurement bid and award documentation
- Contracts
- Payment applications and invoices
- Relevant financial records and transaction support
- Board of Trustees and Citizens Bond Oversight Committee (CBOC) reports
- Staffing plans

Background Information

The Measure E school construction bond was approved by voters in 2002 to provide \$176 million in improvements to Long Beach Community College District facilities. The Measure E school construction bond funds are to be used for the renovation, repair and replacement of aging educational facilities. Bond Programs of this size and complexity require appropriate financial processes and operational controls to ensure compliance, effectiveness, program cost, schedule, quality and efficiency goals are achieved. Moss Adams has been engaged to evaluate construction program controls and provide the required Proposition 39 annual Bond Program performance audits.

Cumulative Measure E Bond Program fund expenditures have been \$5,872,409 through June 30, 2004. Below is a summary of cumulative Bond Program fund expenditures.

2002-2003 Expenditures	\$ 1,377,121
2003-2004 Expenditures	<u>\$ 4,495,288</u>
Cumulative Bond fund Expenditures	<u>\$ 5,872,409</u>

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Executive Summary

The District has implemented controls for the use of school construction bond proceeds to comply with Measure E requirements. The Measure E Bond Program (Bond Program) is at an early stage of implementation. Our performance audit evaluated the \$4,495,288, 2003-2004, Bond Fund expenditures and found no exceptions with the use of Bond Program funds for approved purposes. See Appendix A for a summary of sampled expenditures.

The District's plans for prudent use of Bond Program funds properly consider the students' need for information, and a safe and secure learning environment. The scope of the Bond Program is currently being defined and communicated to District stakeholders by developing the Measure E Facilities Master Plan (Master Plan). Facilities planning documents, used in developing the Master Plan, consider classroom space requirements, future growth, and technology needs.

A construction program management plan has been developed and the facilities master plan should be finalized to implement consistent and efficient application of construction good practices. Current District staffing levels are inadequate to properly effect Bond Program controls as facilities improvement construction activities and expenditures increase. District Staff and outside consultants are working together to review and update the Measure E Bond Program District Policies and Procedures, and to ensure that appropriate controls are developed and applied.

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Key Observations

This report section summarizes our detailed analysis and identifies good construction practices as well as improvement opportunities. The risk ranking of the improvement opportunities is provided in Appendix B for District prioritization purposes.

Task 2 – Detailed Analysis

2.1A Compliance with Ballot, Bond, State and Other Funding Source Requirements

We evaluated Bond Program financial records and expenditure cost support to verify that funds were used for approved Bond Program purposes. In accomplishing this work, we reviewed Bond Program accounting records, contracts, purchase orders, invoices, payment records and other documentation of current expenditures as needed to determine if funds were being used for Bond Program purposes.

Long Beach Community College District provided a Budget Transaction Detail Report for Measure E Program expenditures. Our objective was to validate the use of bond proceeds for the purposes set forth in the Ballot Measure and Bond Documents.

We performed a walkthrough of the Bond Expenditure Cycle and sampled supporting documentation for expenditures totalling \$2,134,368 of the total \$4,495,288 Bond Programs funds expended in 2004.

Good Practices:

- a) The District spent \$4,495,288 of Measure E funds in the fiscal year ending June 30, 2004, and has implemented expenditure management processes to comply with Bond Program requirements.
- b) The District utilizes the services of legal counsel to help ensure appropriate bond fund spending.
- c) Steps have been taken to require expenditure approvals.
- d) The District has developed financial controls to manage the expenditure of Bond funds. Controls are applied for approval and comparison of amounts billed to work performed and contractual requirements.

Improvement Opportunities:

- a) The District needs to create a policy for processing Bond Program Expenditures to augment the District use of the California Community Colleges Budget and Accounting Manual. This manual does not provide District-specific written policies and procedures regarding expenditure controls.
- b) A justification should be drafted for each project, referencing Bond ballot language, to ensure that project spending plans cover work scopes and priorities conformance with Measure E requirements.

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2.1B Schedule, Quality, Scope Management and Performance Efficiency

We evaluated the actions taken by the District to apply policies and procedures that accomplish Bond Program schedule, quality, scope management and performance efficiency goals. This analysis covered approvals required before performance of Bond Program activities and expenditures and the application of a Bond Program delivery model that requires appropriate scope, documented actions and approvals before the design, construction and closeout project phases. We reviewed the definition of deliverables for each project phase and requirements for approvals. This analysis included the review of tools and support processes for each project phase, comparing these to other projects and good industry practices.

Good Practices:

- a) The Facilities Master Plan, currently in draft form, is intended to provide the basis for the Bond Program scope and project time phasing.
- b) The Measure E Construction Bond Program addresses current curriculum needs and objectives as stated in the Bond materials.
- c) The Draft Measure E Bond Program Master Plan addresses Measure E requirements.
- d) Plans for projects cover work scopes and priorities that were established by the Board of Education and include priorities as intended in Proposition 39.
- e) Contract approval is limited to a list of authorized individuals.
- f) The Citizens Oversight Committee represents a cross-section of the community and stakeholders, and provides detailed review of Bond construction status and expenditures.
- g) The Facilities Planning Committee provides guidance regarding educational facility needs, the facilities master plan, needs for new facilities and renovations to existing facilities, and prioritization of projects.
- h) The Bond program delivery model is defined by plans, policies and procedures developed and implemented to serve the Bond program including: 1) District Measure E Bond Program District Policies and Procedures; 2) Bovis Program Management Plan; 3) District Handbook of Purchasing Regulations and Procedures; 4) MIAA Facilities Planning Manual; 5) Long Beach City College Educational Master Plan 2000-2005, and 6) 2003/2004 Priorities and Strategies, from the Long Range Educational Master Plan.
- i) Detailed approvals procedures are described in the organization charts and flowsheets in the Measure E Bond Program District Policies and Procedures.

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Improvement Opportunities:

- a) Project spending is occurring prior to approval of the Facilities Master Plan and may result in expenditures that are not included in the final version of this plan.
- b) Requirements are not in place to ensure that spending is not permitted outside the Facilities Master Plan.
- c) District policies and procedures related to facilities construction (the District Measure E Bond Program District Policies and Procedures) are being reviewed, refined and improved to properly control program performance. These policies and procedures should require change control processes to properly address any modifications to the Facilities Master Plan.
- d) Delivery of the Facilities Planning Manual has been substantially delayed, and needs to be expedited.
- e) District design standards and specifications need to be developed, incorporating specific operations and maintenance needs and standardization where possible.
- f) A formal user acceptance process, incorporating walk-through by both stakeholders and operations and maintenance staff, and utilizing checklists and user evaluation of the completed facilities, needs to be developed by District.
- g) A formal value engineering workshop, adhering to the Society of Value Engineers (SAVE International) principles and methodologies, should be performed at an appropriate phase of design for each project.

2.1C Communication and Fulfillment of Site Expectations

We evaluated actions taken to effectively communicate Bond Program plans with stakeholders, especially the students, faculty, and the surrounding community. This included assessment of whether or not a constant and adequate level of communication was maintained regarding the projects and program.

The methods to communicate renovation plans for each site and new construction plans were reviewed and compared to good practices. This included the review of published plans and evidence of presentations to COC members, faculty, students, the community, and District and Bovis personnel. Responsibility and accountability for site communication of project performance and coordination of site activities was reviewed.

Good Practices:

- a) The District Measure E Policy and Procedures Manual contains a Communications Plan, principally defined as The Community Outreach Program (TCOP).
- b) The community is kept informed about the Bond program through the Citizens Oversight Committee, on-campus forums, the Bond website, and special presentations at College Day and Flex Days.
- c) The Measure E Bond Program Website provides a means for communication of Bond Program plans to the community and stakeholders.
- d) Bovis prepares an annual newsletter to communicate the status of the Program to the community.
- e) The Long Beach City College Master Plan is posted on the Bond website, along with an overview of the purpose of the Bond. Detailed information about individual projects is also available on the Bond website.

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- f) Individual project overview and status are communicated on the Bond website and in the Bovis Builder newsletter.
- g) Meetings are held on both the Liberal Arts Campus and the Pacific Coast Campus.

Improvement Opportunities:

- a) Additional safety information that directly affects the community needs to be available, such as noise and hazard advisory, emergency contacts and procedures, and area evacuation plans.
- b) More detailed communication regarding construction impacts should be created, showing not just the areas affected but also a schedule of disruption by month. Instructions need to be provided regarding alternate routes, parking recommendations, and hours and weekdays of on-site construction.
- c) It is evident that District has more facilities needs than can be achieved through the use of Bond funds, this gap should be fully communicated to District Stakeholders.

2.1D Facilities Programming and Implementation Plan Approach

We evaluated the processes used to identify facility needs, programming and coordination to comprehensively address site needs. Coordination with maintenance, user groups, key stakeholders, and Academic Affairs was considered in this analysis, along with the inclusion of appropriate personnel. The Moss Adams team reviewed site assessments, master plans, and relevant reports. We looked for a business justification and indicators of success for each project, including the measurable anticipated benefits and the impact of the project on the District's operational performance. Facilities Master Plan activities were evaluated for consideration of student needs in assessing the equitable and fair use of Bond Program funds.

Good Practices:

- a) The Draft Facilities Master Plan provides a means to achieve equity of facilities among departments and programs while giving consideration to available Bond proceeds and work flow timing.
- b) Facility planning policies can be found in the District Measure E Policy and Procedures Manual.
- c) Growth projections are based on population growth, which are supported by historical attendance for each educational program.
- d) Critical facilities (new and renovation) needs are based upon the facilities planning priorities. Prioritization is driven by need, with health and safety as a top priority, followed by the needs identified in the Educational Master Plan.
- e) The State of California (through the California Community College Chancellor's Office) has strict guidelines regarding space allocation and weekly student contact hours, which were adhered to during facilities planning.
- f) Population distribution, need for parking relief, use of surge space and temporary/permanent relocation of departments was considered when developing the Draft Facilities Master Plan.
- g) District administrative and educational staff, student representatives, architects, inspectors, consultants and construction personnel are all included in the facilities planning process.

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Improvement Opportunities:

- a) Completion of the Facilities Planning Manual needs to be expedited. Delivery of the Facilities Planning Manual has been substantially delayed, and is having a domino-effect impact on all planning, design, and construction activities and deliverables.
- b) Growth projections should be reviewed periodically for accuracy, and updated.
- c) The Facilities Maintenance and Operations plan needs to be updated and priorities reviewed.
- d) Peer review methodologies could be used to catch design errors and omissions, and identify areas for improvement.
- e) A quarterly cash flow projection needs to be developed for the use of Bond funds. The District should apply cash flow requirements forecasting to fund construction program requirements, which would allow the District to manage the timing of additional Bond issuances, compare performance to budget and provide the stakeholders better visibility of the District's Construction Program fiscal management.
- f) District design standards and specifications need to be developed, incorporating specific operations and maintenance needs and standardization where possible.

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2.1E Flexibility to Address Changing Education and Enrollment Conditions

We analyzed the flexibility in the Measure E Bond Program eligible projects list as well as the flexibility inherent in facility design as it relates to future changes in the District's needs and requirements. The performance audit team reviewed options for flexibility in terms of contingencies for growth and educational needs. This analysis considered both the need for standardization of cost management and maintainability as well as flexibility to meet District needs and requirements.

Good Practices:

- a) Interim facilities will be used to accommodate overflow during construction and renovation.

Improvement Opportunities:

- a) The education requirements by department and growth projections should be reviewed closely for flexibility.
- b) A contingency plan needs to be developed, to address potential cost and schedule overruns.

2.1F Regulatory Compliance

We evaluated controls implemented to comply with select Federal, State and local codes as well as Proposition 39 requirements. This included seeking evidence of regular communication with the California Community College Chancellor's Office (CCCCO) and the Division of State Architects (DSA), and the review of published policies, plans and procedures.

Good Practices:

- a) Bovis has a published Environmental Compliance Policy, and the Environmental Impact Report (EIR) is being prepared by the Chambers Group (Bovis Subcontractor).
- b) Bovis adheres to the Chancellor's Office Facilities Planning Manual for managing the Bond projects.
- c) The District Facilities Department communicates frequently with the California Community College Chancellor's Office.
- d) Bovis has defined safety practices, as evidenced by the Bovis Lend Lease / State of California IIP Program and SEMS manual, and posted safety and emergency information in the Bovis trailer.
- e) The Labor Compliance Plan is defined as required by Assembly Bill 1506 as implemented by the Solis Group (Bovis Subcontractor).

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Improvement Opportunities:

- a) The District should ensure that the architects meet with the DSA as early as possible during the project design process, so as to avoid revisions during the plan check stage.
- b) Based upon evidence that the State is considering adoption of the NFPA 5000 Building Code and the NFPA 1 Uniform Fire Code in April 2007, the architects should ensure that they are aware of potential building code changes so that designs created in later phases of the Bond implementation are in compliance.
- c) Bovis' onsite practices should be periodically reviewed for compliance with Bovis safety program requirements.
- d) The Long Beach Community College Injury Prevention Program Manual, dated February 1991, is controlled by Support Services and is being revised. The final version of this manual should be fully communicated and integrated in the Bond Program.

2.2A Cost, Schedule and Budgetary Management and Reporting

We reviewed Bond Program reporting as needed to provide current, accurate and complete cost, schedule and budgetary information to Program stakeholders. Based on the interviews and information gathered during the course of the project audit, analysis was conducted to determine whether or not there is adequate executive oversight and involvement in each of the audited projects. This analysis also reviewed the cost, schedule and budgetary reporting methodologies.

Good Practices:

- a) The District has defined program performance reporting requirements.
- b) Various communication forums are used each month to manage the Bond Program. These meetings provide for discussion and review of the status of projects, budget reports, change orders and payment application approvals.
- c) Bovis is using an independent third party to provide design phase cost estimates and estimate checks (Saylor Consulting, Bovis Subcontractor).
- d) Implementation of project management software.
- e) Cost benchmarking against regional averages (Saylor).
- f) Evaluation of cost escalation issues (Saylor).
- g) Lessons learned and continuous improvement efforts (Saylor).
- h) District executive-level review of project status and expenditures.
- i) The District has defined controls for budget modification.

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Improvement Opportunities:

- a) The District should improve Bond Program reporting controls by providing a quarterly summary of Bond Program performance against cost, schedule, scope and safety goals. Specifically, a procedure should be adopted to provide a complete report to Board Members and District Administration. This report should provide a program level financial performance summary that covers all Measure E projects and compares Bond Program forecasted expenditures to Bond Program budgets. Bond Program reporting should be expanded to include: a) earned value comparison to budgeted cost milestones and b) safety incidents.
- b) The Bond reporting effectiveness should be reviewed, once the Expedition, PeopleSoft and the Simpson and Simpson budget database software and systems are fully implemented.
- c) Development and adoption of a detailed construction schedule, with baseline, is needed immediately.
- d) It is advisable for Bovis to review each contractor's schedule carefully, and pay close attention to resource loading to avoid overcommitment of crews. Close monitoring of the contractor's schedule is important, with key milestones identified and items linked or related to the overall baseline schedule deliverables.
- e) The functionality of the Simpson and Simpson master program budget tool should be reviewed upon implementation. As the system is implemented, the District should review the reports over several months, and ensure that all costs tracked in PeopleSoft are also reported in the Simpson and Simpson software tool.
- f) The functionality of the Expedition project management system should be reviewed upon implementation.
- g) With schedule lag and the lack of an acceptable baseline presenting such a high risk to the projects, we advise that schedule review should be done every two weeks, at a minimum.
- h) As design progresses and construction begins, we advise that close attention be paid to variance reporting and justification.
- i) District needs to develop policies and procedures specific to the PeopleSoft system. Fiscal Operations has recently implemented a new PeopleSoft system.

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2.2B Procurement Controls and Contract Administration

We reviewed District procurement controls for consistency, adherence to District purchasing policies and application of competitive and fair subcontracting practices. Procurement controls were evaluated for application of competitive and fair subcontracting practices that can prevent excessive expenditures.

Good Practices:

- a) Bovis has competitive bidding procedures that address construction project bidder prerequisites and selection criteria.
- b) Bovis competitive bidding procedures provide for verification of bidder compliance and comparison of bidder qualifications and pricing.
- c) The work to be performed is confirmed by the project manager, cost estimates are reviewed, and there is an approval process for contractor selection.
- d) Separate files are maintained for project documentation.
- e) Effort on the part of the District to review and improve all District procurement processes.

Improvement Opportunities:

- a) The District does not always take advantage of competition in the procurement of professional services, and when the District does pursue competition the process is often shortchanged by limited advertisement, a succinct supplier list, or a short turnaround time.
- b) Both Bovis and the District need to take greater care in documenting the procurement process.
- c) Both Bovis and District documentation need to be complete for all contract files, especially the proof of insurance.
- d) District procedures covering the evaluation of professional service contracts should be documented and provide guidance on the assessment of required services, standard professional service contracts, scope definition, supplier qualifications, contract pricing and terms.
- e) RMA (District contractor) review of District purchasing procedures, as part of the update to the District Measure E Bond Program District Policies and Procedures, needs to be completed.
- f) District purchase orders need to contain a relationship justification to the Bond Program.
- g) The District Handbook of Purchasing Regulations and Procedures, dated 1983, needs to be reviewed and updated to include current District practices.

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2.2C Change Management and Control

We evaluated District policies, procedures and practices to manage change orders and related costs. Procurement and project controls were evaluated for evidence of change management that help prevent excessive expenditures.

Good Practices:

- a) Bovis has defined control processes to identify change order causes and to evaluate change order costs.
- b) Approvals are required for change order processing and adoption.

Improvement Opportunities:

- a) District contracts should be written only after the job scope is well defined, and amendments reserved for scope and rate changes or contract extensions.
- b) The District needs to develop a formal change management plan, to apply best practices in providing appropriate approvals and in preventing unnecessary changes and excessive change order cost.
- c) Although Bovis has change order procedures specific to contracts, Bovis and the District need to work together to develop a formal program change management plan, to prevent excessive expenditures.
- d) As design progresses and construction begins, a controls methodology should be developed and implemented for budget modification and documentation.
- e) Change order cost estimates for change orders should be performed by an independent third party.

2.2D Contractor Cost Control

We evaluated control processes applicable to the review and approval of contractor payment applications. District practices were documented, testing was conducted in conjunction with interviews evaluate the events and circumstances surrounding the validation of contract billings compliance practices.

Good Practices:

- a) The District and Bovis review and approve contractor costs for each signed contract.
- b) Bovis reviews and addresses observed anomalies in subconsultant timesheets.
- c) The District requires the comparison of fees and rates charged to contract amounts.
- d) The District reviews and adjusts, or requests resubmittal, of consultant invoices that appear to contain errors.
- e) Invoices have been held for payment until the contract documentation was complete and the purchase order issued.

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Improvement Opportunities:

- a) Procedures should be properly defined to specify appropriate review and approval of contractor payment applications and to prevent payments that exceed contractual maximums or payments for otherwise unallowable charges.
- b) Percentage of completion should be reviewed and approved to prevent early payments for work not performed. This control will help the District to pay only for actual work performed and is a control to manage Bond fund cash flow.
- c) More careful review of consultant invoices is needed, with respect to contract terms (especially hourly rates and reimbursable expenses).
- d) Adequate controls need to be developed and implemented for the review and approval of invoices from Bovis. The District should procure services from an independent third party to perform pay application review.
- e) Bovis should indicate, in a summary format on the Payment Application letter, the distribution of labor between funds.
- f) There may be an opportunity for cost savings by establishing preferred District sources for Bovis office supplies, cleaning supplies, and coffee supplies through the District Procurement Office.
- g) A justification for reimbursable expenses needs to be provided with contractor invoices.

2.2E Construction Contract Protections

We assessed the application of a contracting control structure that can help protect the District from unreasonable costs and/or poor quality construction practices. A sampling of the areas covered by this analysis includes:

- Standard terms and conditions that address relevant cost control risks
- Well defined responsibilities and accountabilities
- Audit rights and provision for validation of pricing and costs
- Specified project reports and back-up documentation requirements
- Defined cost element ceiling amounts
- Owner's representative overtime pre-approval
- Well-defined overhead category costs (home office, small tools etc.)
- Substantial completion requirements
- Appropriate and cost effective insurance coverage
- Inspection and closeout requirements

Good Practices:

- a) Contracts have been applied to work performed.
- b) The District has established contractual protections.
- c) Contractual terms consider State of California requirements.
- d) A schedule of fees and scope of services are included in every contract.
- e) A standardized contract is used, which reduces counsel contract review costs.
- f) Use of liquidated damages to protect against schedule overruns.
- g) Inclusion of licensing requirements in construction contracts.
- h) Legal counsel review of specialized professional services and construction contracts.

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Improvement Opportunities:

- a) The standard contract and procurement forms should be updated.
- b) District procedures regarding the evaluation of professional service contracts should be documented and provide guidance on the assessment of required services, standard professional service contracts, scope definition, supplier qualifications, contract pricing and terms. Any updates to improve standard terms and conditions should be applied as these needs may surface during the evaluation of professional service contracts.
- c) The District Support Services Office, or insurance broker, should have the opportunity to review contracts from a risk management perspective prior to acceptance.
- d) Certificates of insurance need to be obtained from all subconsultants.
- e) Contract and amendment approval needs to be performed in a timely fashion and completed before consultant invoices are received for services performed against the contract.

2.2F Contractor Liens, Claims and Other Closeout Issues

We evaluated the District's policies, procedures and practices to obtain lien releases, prevent claims and address project closeout issues. This review included analysis of checklists, procedures, retention policies, and contract terms and conditions. The performance audit team looked for implementation of procedures to clearly identify the parameters for contractor performance, and compared the District's closeout procedures to best practices. This included review of the criteria for all relevant parties to determine whether a project is complete. The team also evaluated the processes to verify there is full and complete release of contractor liens and other claims prior to final payment.

Good Practices:

- a) Detailed quality assurance, claims and closeout policies and procedures in the Bovis Program Management Plan.
- b) District executive-level, facilities, faculty and student involvement during the construction process, and review of the facilities plan and design are applied to help achieve a higher likelihood of user acceptance and facility acceptability.

Improvement Opportunities:

- a) A formal contract closeout process, incorporating final payment and contractor performance evaluation, needs to be developed by District.
- b) A formal user acceptance process, incorporating walk-throughs by both stakeholders and operations and maintenance staff, and utilizing checklists and user evaluation of the completed facilities, needs to be developed by the District.
- c) A formal dispute and claims management process, incorporating claims avoidance, mitigation, mediation and arbitration needs to be developed by the District to supplement that stated in the contract.
- d) A lessons-learned methodology and project closeout procedure should be developed by District.

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2.3A Program Staffing

Through interviews of key operational personnel, review of program work flows, analysis of relevant expenditures, and observation of position and work requirements, we have assessed the assumptions and the basis for Bond Program staffing plans. Bond program management needs were compared to staffing required to meet those needs. Our experience with reviewing staffing at other academic capital programs as well as our assessment of factors unique to the District formed the basis of this analysis.

Good Practices:

- a) The Bovis staffing plan and organization chart are frequently reviewed and updated to address District needs and best use of staff skills.
- b) The District uses contractors to address short-term staffing needs.
- c) Internship opportunities for District students provide both additional staff and work experience for students.
- d) Bovis uses subconsultants to fill skills gaps and to address short-term staffing needs.

Improvement Opportunities:

- a) Current Facilities Construction staffing levels are inadequate to properly control construction program cost, schedule and scope. Based on our experience, additional District management level staffing is needed to oversee program management personnel and to respond to bond program needs. Furthermore, additional personnel are needed to ensure cost efficient procurement of services and to help ensure contractor billings are compliant. Adequate District oversight is critical to address exposures that can keep the Bond Program from achieving its' cost, schedule and scope objectives. On November 9, 2004, the Attorney General of the State of California indicated that a school district can use Proposition 39 school bond proceeds to pay the salaries of district employees who perform administrative oversight work on construction projects. It is the intent of the District to use this opinion as a basis for using Bond Program monies to hire additional staff for school construction.
- b) One qualified District person should be identified as a single full-time point of contact for program stakeholders.
- c) The District should establish a plan for both increasing construction program staffing as well as for any needed staff reductions. Training and accountability for use of Facilities Construction policies and procedures, as well as staffing level milestones, should be integral to this plan.
- d) Permanent Facilities Department staffing levels should be evaluated, especially maintenance and operations staff. An outside consultant (Ewing) was used to determine custodial needs. We recommend that a similar study be done to review maintenance staff needs, considering the substantial increase in building square foot as a result of the Bond program.
- e) The acquisition and implementation of facilities management software will improve efficiency in the Facilities Department.

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APPENDIX A – BOND PROGRAM EXPENDITURE TESTING

Below is a summary of 2004 Bond Program expenditures and the amount sampled to validate the use of these expenditures for approved Bond Program purposes and compliance with contract terms.

	<u>Expended</u>	<u>Tested</u>
Program Management	\$ 2,500,643	\$ 624,008
Master Planning	221,042	129,402
Architect & Engineering	1,228,314	1,079,162
Legal Services	42,926	28,955
Site Evaluations	151,337	118,531
Projects:		
Building A - Electrical Upgrades	122,334	12,037
Bldgs. J and GG - Roofing	102,019	77,400
Miscellaneous Bond Expenses	<u>126,673</u>	<u>64,873</u>
TOTAL	<u>\$ 4,495,288</u>	<u>\$ 2,134,368</u>

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APPENDIX B – IMPROVEMENT OPPORTUNITIES

The improvement opportunities, identified in this report, have been ranked as high, medium, or low priority in this appendix. This ranking is based upon our professional experience with respect to potential probability and impact on construction program cost, schedule, and scope goals.

2.1A Compliance with Ballot, Bond, State and Other Funding Source Requirements

High Priority:

- The District needs to create a policy for processing Bond Program Expenditures to augment the District use of the California Community Colleges Budget and Accounting Manual. This manual does not provide District-specific written policies and procedures regarding expenditure controls.

Medium Priority:

- A justification should be drafted for each project, referencing Bond ballot language, to ensure that project spending plans cover work scopes and priorities conformance with Measure E requirements.

2.1B Schedule, Quality, Scope Management and Performance Efficiency

High Priority:

- Project spending is occurring prior to approval of the Facilities Master Plan and may result in expenditures that are not included in the final version of this plan.
- Requirements are not in place to ensure that spending is not permitted outside the Facilities Master Plan.
- Delivery of the MIAA Facilities Planning Manual has been substantially delayed, and needs to be expedited.
- A formal user acceptance process, incorporating walk-through by both stakeholders and operations and maintenance staff, and utilizing checklists and user evaluation of the completed facilities, needs to be developed by District.
- District design standards and specifications need to be developed, incorporating specific operations and maintenance needs and standardization where possible.

Medium Priority:

- District policies and procedures related to facilities construction (the District Measure E Bond Program District Policies and Procedures) are being reviewed, refined and improved to properly control program performance. These policies and procedures should require change control processes to properly address any modifications to the Facilities Master Plan.
- A formal value engineering workshop, adhering to the Society of Value Engineers (SAVE International) principles and methodologies, should be performed at an appropriate phase of design for each project.

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2.1C Communication and Fulfillment of Site Expectations

High Priority:

- More detailed communication regarding construction impacts should be created, showing not just the areas affected but also a schedule of disruption by month. Instructions need to be provided regarding alternate routes, parking recommendations, and hours and weekdays of on-site construction.
- Additional safety information that directly affects the community needs to be available, such as noise and hazard advisory, emergency contacts and procedures, and area evacuation plans.
- It is evident that District has more facilities needs than can be achieved through the use of Bond funds, this gap should be fully communicated to District Stakeholders.

2.1D Facilities Programming and Implementation Plan Approach

High Priority:

- Completion of the Facilities Planning Manual needs to be expedited. Delivery of the Facilities Planning Manual has been substantially delayed, and is having a domino-effect impact on all planning, design, and construction activities and deliverables.
- A quarterly cash flow projection needs to be developed for the use of Bond funds. The District should apply cash flow requirements forecasting to fund construction program requirements, which would allow the District to manage the timing of additional Bond issuances, compare performance to budget and provide the stakeholders better visibility of the District's Construction Program fiscal management.

Medium Priority:

- Growth projections should be reviewed periodically for accuracy, and updated.
- District design standards and specifications need to be developed, incorporating specific operations and maintenance needs and standardization where possible.
- Peer review methodologies could be used to catch design errors and omissions, and identify areas for improvement.

Low Priority:

- The Facilities Maintenance and Operations plan needs to be updated and priorities reviewed.

2.1E Flexibility to Address Changing Education and Enrollment Conditions

Medium Priority:

- The education requirements by department and growth projections should be reviewed closely for flexibility.
- A contingency plan needs to be developed, to address potential cost and schedule overruns.

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2.1F Regulatory Compliance

High Priority:

- The District should ensure that the architects meet with the DSA as early as possible during the project design process, so as to avoid revisions during the plan check stage.
- Based upon evidence that the State is considering adoption of the NFPA 5000 Building Code and the NFPA 1 Uniform Fire Code in April 2007, the architects should ensure that they are aware of potential building code changes so that designs created in later phases of the Bond implementation are in compliance.
- Bovis' onsite practices should be periodically reviewed for compliance with Bovis safety program requirements.

Medium Priority:

- The Long Beach Community College Injury Prevention Program Manual, dated February 1991, is controlled by Support Services and is being revised. The final version of this manual should be fully communicated and integrated in the Bond Program.

2.2A Cost, Schedule and Budgetary Management and Reporting

High Priority:

- The District should improve Bond Program reporting controls by providing a quarterly summary of Bond Program performance against cost, schedule, scope and safety goals. Specifically, a procedure should be adopted to provide a complete report to Board Members and District Administration. This report should provide a program level financial performance summary that covers all Measure E projects and compares Bond Program forecasted expenditures to Bond Program budgets. Bond Program reporting should be expanded to include: a) earned value comparison to budgeted cost milestones and b) safety incidents.
- Development and adoption of a detailed construction schedule, with baseline, is needed immediately.
- With schedule lag and the lack of an acceptable baseline presenting such a high risk to the projects, we advise that schedule review should be done every two weeks, at a minimum.
- As design progresses and construction begins, we advise that close attention be paid to variance reporting and justification.

Medium Priority:

- The Bond reporting effectiveness should be reviewed, once the Expedition, PeopleSoft and the Simpson and Simpson budget database software and systems are fully implemented.
- The functionality of the Simpson and Simpson master program budget tool should be reviewed upon implementation. As the system is implemented, the District should review the reports over several months, and ensure that all costs tracked in PeopleSoft are also reported in the Simpson and Simpson software tool.
- It is advisable for Bovis to review each contractor's schedule carefully, and pay close attention to resource loading to avoid over-commitment of crews. Close monitoring of the contractor's schedule is important, with key milestones identified and items linked or related to the overall baseline schedule deliverables.
- The District should develop policies and procedures specific to the PeopleSoft system. Fiscal Operations has recently implemented a new PeopleSoft system.

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2.2A Cost, Schedule and Budgetary Management and Reporting (continued)

Low Priority:

- The functionality of the Expedition project management system should be reviewed upon implementation.

2.2B Procurement Controls and Contract Administration

High Priority:

- Both Bovis and the District need to take greater care in documenting the procurement process.
- Both Bovis and District documentation need to be complete for all contract files, especially the proof of insurance.
- The District does not always take advantage of competition in the procurement of professional services, and when the District does pursue competition the process is often shortchanged by limited advertisement, a succinct supplier list, or a short turnaround time.
- District purchase orders need to contain a relationship justification to the Bond Program.

Medium Priority:

- District procedures covering the evaluation of professional service contracts should be documented and provide guidance on the assessment of required services, standard professional service contracts, scope definition, supplier qualifications, contract pricing and terms.
- RMA (District contractor) review of District purchasing procedures, as part of the update to the District Measure E Bond Program District Policies and Procedures, needs to be completed.

Low Priority:

- The District Handbook of Purchasing Regulations and Procedures, dated 1983, needs to be reviewed and updated to include current District practices.

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2.2C Change Management and Control

High Priority:

- District contracts should be written only after the job scope is well defined, and amendments reserved for scope and rate changes or contract extensions.
- The District needs to develop a formal change management plan, to apply best practices in providing appropriate approvals and in preventing unnecessary changes and excessive change order cost.
- Although Bovis has change order procedures specific to contracts, Bovis and the District need to work together to develop a formal program change management plan, to prevent excessive expenditures.
- Change order cost estimates for change orders should be performed by an independent third party.

Medium Priority:

- As design progresses and construction begins, a controls methodology should be developed and implemented for budget modification and documentation.

2.2D Contractor Cost Control

High Priority:

- More careful review of consultant invoices is needed, with respect to contract terms (especially hourly rates and reimbursable expenses).
- Adequate controls need to be developed and implemented for the review and approval of invoices from Bovis. The District should procure services from an independent third party to perform pay application review.
- There may be an opportunity for cost savings by establishing preferred District sources for Bovis office supplies, cleaning supplies, and coffee supplies through the District Procurement Office.
- Percentage of completion should be reviewed and approved to prevent early payments for work not performed. This control will help the District to pay only for actual work performed and is a control to manage Bond fund cash flow.

Medium Priority:

- Bovis should indicate, in a summary format on the Payment Application letter, the distribution of labor between funds.
- A justification for reimbursable expenses needs to be provided with contractor invoices.

Low Priority:

- Procedures should be properly defined to specify appropriate review and approval of contractor payment applications and to prevent payments that exceed contractual maximums or payments for otherwise unallowable charges.

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2.2E Construction Contract Protections

High Priority:

- Contract and amendment approval needs to be performed in a timely fashion and completed before consultant invoices are received for services performed against the contract.
- Certificates of insurance need to be obtained from all subconsultants.
- District procedures regarding the evaluation of professional service contracts should be documented and provide guidance on the assessment of required services, standard professional service contracts, scope definition, supplier qualifications, contract pricing and terms. Any updates to improve standard terms and conditions should be applied as these needs may surface during the evaluation of professional service contracts.

Medium Priority:

- The District Support Services Office, or insurance broker, should have the opportunity to review contracts from a risk management perspective prior to acceptance.

Low Priority:

- The standard contract and procurement forms should be updated.

2.2F Contractor Liens, Claims and Other Closeout Issues

High Priority:

- A formal user acceptance process, incorporating walk-throughs by both stakeholders and operations and maintenance staff, and utilizing checklists and user evaluation of the completed facilities, needs to be developed by the District.
- A formal contract closeout process, incorporating final payment and contractor performance evaluation, needs to be developed by District.

Medium Priority:

- A formal dispute and claims management process, incorporating claims avoidance, mitigation, mediation and arbitration needs to be developed by the District to supplement that stated in the contract.

Low Priority:

- A lessons-learned methodology and project closeout procedure should be developed by District.

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2.3A Program Staffing

High Priority:

- Current Facilities Construction staffing levels are inadequate to properly control construction program cost, schedule and scope. Based on our experience, additional District management level staffing is needed to oversee program management personnel and to respond to bond program needs. Furthermore, additional personnel are needed to ensure cost efficient procurement of services and to help ensure contractor billings are compliant. Adequate District oversight is critical to address exposures that can keep the Bond Program from achieving its' cost, schedule and scope objectives. On November 9, 2004, the Attorney General of the State of California indicated that a school district can use Proposition 39 school bond proceeds to pay the salaries of district employees who perform administrative oversight work on construction projects. It is the intent of the District to use this opinion as a basis for using Bond Program monies to hire additional staff for school construction.
- One qualified District person should be identified as a single full-time point of contact for program stakeholders.
- The District should establish a plan for both increasing construction program staffing as well as for any needed staff reductions. Training and accountability for use of Facilities Construction policies and procedures, as well as staffing level milestones, should be integral to this plan.
- Permanent Facilities Department staffing levels should be evaluated, especially maintenance and operations staff. An outside consultant (Ewing) was used to determine custodial needs. We recommend that a similar study be done to review maintenance staff needs, considering the substantial increase in building square foot as a result of the Bond program.

Medium Priority:

- The acquisition and implementation of facilities management software will improve efficiency in the Facilities Department.