



Capital Construction Proposition H Bond Program Performance Review

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**GUHSD Prop H Program Review
July 2007**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SECTION 1: Overall Bond Program and Progress to Date	5
SECTION 2: Design Team Costs and Reasonableness of Fees ...	14
SECTION 3: Construction Management Services	21
SECTION 4: Two Selected Project Analyses	28
SECTION 5: Labor Compliance Program	38
SECTION 6: Construction Cost Escalation	44

GUHSD Prop H Program Review

July 2007

EXECUTIVE SUMMARY

AF Consultants was retained by the Grossmont Union High School District (GUHSD) to review the overall performance of the Proposition H Bond Program. Our review was not intended to be a detailed financial or performance audit. The purpose was to provide an independent third party view of the Prop H program with comments on current policies and procedures being used by the District. The report is limited in its findings due to this being the first review of the program and the difficulty of reconstructing events from March 2004 to the present. We also recognize that the District is in the midst of reorganizing its policies, procedures, and staff and we have commented on progress being made in that regard. Generally, we are issuing recommendations in support of the new management and the changes they are making to make Prop H a success.

We began our assessment in May 2007, by meeting with District staff and a CBOC and Governing Board member to review our scope of work. We then began collecting supporting documentation from District files. Several follow-up visits were made to the District's office to collect data, discuss procedures, and gain further insight. We interviewed several key personnel working on the program and found them to be cooperative and helpful. We completed our work in July 2007, and discussed a final draft of our report with District staff.

Overall we reviewed the focus areas as outlined in the GUHSD "Request for Proposal." These focus areas were then broken down into six (6) areas for this review. The following summary highlights these six areas and gives corresponding recommendations based on our findings. Included in this report are:

Section 1: Overall Bond Program and Progress to Date

- *We concur with the District's decision to issue an RFP for a Program Manager. We strongly believe that the Program Management function will bring stability to the overall bond program and become a coordinating point for all project activities.*
- *We recommend that the District review and revise the scope of work assigned to the Master Architect and Construction Manager.*
- *When the Program Manager has been hired we recommend the District consider revising and updating the Program/Project Manual and defining more clearly the role of each stakeholder in the program. This can be used as a tool to develop accountability and create transparency with the public.*
- *We commend the District's development of a standardized reporting format with consistent project titles, budgets, and schedules in an easily readable format for use by District accounting, CBOC, and the Board.*

GUHSD Prop H Program Review July 2007

- *We concur with District's decision to issue an RFP for a consultant to support the CBOC. We recommend the District strengthen the communications with all stakeholder groups by delivering monthly financial and informative status reports, through use of the web site and through public program status meetings.*

Section 2: Design Team Costs and Reasonableness of Fees

- *We recommend that the District consider adopting an architectural contract format which more clearly defines the scope, budget, and schedule for projects. This contract format should give the District more control over these elements.*
- *We recommend that the District separate basic architectural services agreements for project design and construction and set limits on lump sum agreements for specialized and additional services.*
- *We recommend that the District, in consultation with legal counsel, review the current contract language and modify the fee structure to eliminate ambiguous interpretations, fee calculations, and consider adjustments to the contract such that the A/E fee is fixed based upon an estimate at completion of working drawings.*
- *We recommend that the District verify if the campus assessment work has been completed at each school, and after verifying the completion, close out that portion of the contract.*
- *We recommend that the District review the A/E reimbursable expenses charged to the school assessments to insure that the charges are accurately capitalized and accounted for against each school.*

Section 3: Construction Management Costs and Reasonableness of Fees

- *We recommend that the District, for accounting purposes, issue an amendment to the contract to close out the costs for the Executive Director and extend the contract completion to March 2005.*
- *We recommend that the District amend the service agreement to eliminate those tasks that will likely not be provided.*
- *We recommend that the District consider lowering the CM General Conditions allowance of 8% to more closely reflect actual costs being incurred.*
- *We recommend that the District confirm that the CM fees are reconciled once trade contracts for Phase 2B are executed.*
- *We recommend that the District more clearly define "reimbursable costs" in the contract.*
- *We recommend that the District require the CM to furnish complete support for the General Conditions costs as required by contract on a monthly basis.*

GUHSD Prop H Program Review July 2007

- *We recommend that the District consider a policy of approving the use of sub-consultants by the CM when costs are significant.*

Section 4: Selected Project Analysis

- *We recommend that the District reconcile its records to more clearly apportion the fee to the projects for accounting purposes.*
- *As the program progresses, we recommend that the District, through a Program Manager or in-house staff, take a more pro-active approach toward budget control through value engineering sessions at schematic, preliminary, and working drawing phases of project development.*
- *We recommend that the District consider maintaining a record of change orders on each project and assign them by reason category.*

Section 5: Labor Compliance Program

- *We recommend that the District verify that the Labor Compliance firm did not exceed their fee on a per project basis, by requesting actual time expended on each project.*
- *We recommend that once the District collects the Labor Compliance costs, that they allocate them to the projects for accounting purposes.*

Section 6: Construction Cost Escalation

- *We concur with the current District administration's approach to dealing with overall program deficits as a result of cost escalation. They have shared information with the various stakeholders and the Board and are in the process of seeking new direction.*

In summary, we collected significant data during our review and were able to reconstruct several significant past events, make observations, and pose issues facing the District in the future. Even faced with significant cost escalation from the program beginning, we feel the bond program has been moving forward adequately but will be more efficiently managed as it enters a new phase. Our significant findings include the following:

- Prior to the Prop H bond issue vote in March 2004 we believe there were inadequate estimates of the cost of delivering the entire program. This has been exacerbated by cost escalation increases experienced in the construction industry.
- Prior to the current administration, there was a lack of overall Program Management and budget control. This has currently been corrected by the District.

GUHSD Prop H Program Review July 2007

- Prior to the current administration, there was a lack of adequate reporting and dissemination of information. Financial and process improvements to provide a more transparent program to the public are currently being made by the District.

The remainder of our assessment follows this Executive Summary and identifies the level of detail that we reviewed by specific subject area. Overall, we feel that with the proposed modifications currently taking place at the District, the Prop H Bond Program is well on its way to success.

GUHSD Prop H Program Review

July 2007

SECTION 1: OVERALL BOND PROGRAM AND PROGRESS TO DATE

As part of our review, we were asked to address the degree of progress the District has made towards completion of the total program within the stated schedule and availability of funds, including maximizing the acquisition of any available State funding.

During the preparation of such reports, we normally discuss and compare any variances to the original scope, budget, schedule, and overall progress to date as compared to the original plan. Year to year comparisons are made and discussion is incorporated which compares CPM schedules, cash flow projections, and reasons for the variances, if any. District progress towards meeting the overall stated goals is discussed as well as any plans to mitigate shortfalls.

Since this is the first year for review of the Prop H program, we felt it necessary to provide the background of the overall bond program since its inception in March 2004 and changes that have been made since that time. Numerous administrative and structural program changes have been recently proposed and continue to be implemented concurrent with this report. To compensate for the ongoing activities we also felt it necessary to recap, as much as possible, our view on the progress being made towards completion of the total program.

As part of our research we reviewed the following documents:

- *GUHSD Governing Board Agenda, dated October 9, 2003*
- *GUHSD Governing Board Agenda, dated April 29, 2004*
- *GUHSD Citizens Oversight Committee (CBOC) web site, agendas and meeting minutes as published from 2004 through May 2007*
- *Board of Education Workshop presentation dated February 3, 2007*
- *Letter to Governing Board President from SD Taxpayers Assn., dated April 9, 2007, and response date April 13, 2007*
- *GUHSD Prop H Expenditure Detail Summaries by Project dated April 20, 2007*
- *Draft Proposed Organization Charts for Prop H dated April 23, 2007*
- *Draft Construction Management Manual prepared by Erickson-Hall*

Original Bond Program Plan: 2004/05 FY Activities

Proposition H, a \$274.0 M Bond Measure, was approved by the voters in March 2004. The intent of the program was to repair aging high schools in the District and construct a new school. Additionally, it was intended to improve student safety, upgrade deteriorated systems, infrastructures, and renovate outdated classrooms, science lab,

GUHSD Prop H Program Review July 2007

and school facilities. The Prop H Bond Measure was sized based on a list of improvements and estimates prepared for the District by the HMC Group in 2003. Incorporated into a Long Range Facilities Master Plan (LRFMP) with input from the Manager of Facilities at each school site, this document was presented to the Governing Board in October, 2003. The LRFMP was estimated at \$370.8 M which was to include funding for a new school estimated at approximately \$71.6 M. The LRFMP was broken down into "must do", "should do", and "want to do" categories for each District facility. The overall intent of the Bond Measure was then sized to couple bond funds with state matching funds for modernization and new construction, to achieve a total program of approximately \$394M (recently estimated at \$409M). Thus, only 67% of the total funds were to come from the Bond Measure, with the remaining funding from State sources.

Beginning in April of 2004, with passage of the Bond Measure, the District issued an RFP to procure both a Master Architect and a Construction/Program Manager. This culminated in contracts being issued in July of 2004, to two firms, HMC Architects and Erickson-Hall. We reviewed the Governing Board Meeting minutes dated May 20, 2004, approving these two consultants as part of the Prop H endeavor. We believe the intent of the District at that time was to have the Master Architect reassess the needs of the various schools in more detail, prepare a program and master plan for each school, and design projects (as assigned by the District), and to monitor the program progress throughout its life. In essence the Master Architect would act as a Program Manager through a master enabling agreement. The hired Construction/Program Manager, on the other hand, was to assist in this endeavor by providing construction expertise, estimates, manage contracts with trade subcontractors as a CM Agent, and provide General Conditions support for the individual projects and the overall District program. Both consultants were charged with some phase of Program Management typically done by an independent consultant.

The District also supplemented in-house staff to support these two contracts to manage the program. Early in the process, the District hired a project manager on staff to be the interface with the consultants and direct the program.

As a first expenditure step, on April 13, 2004, the District issued the first series of bonds in the amount of \$70M and elected to pay off \$28.7M in Certificates of Participation (COP) for West Hills and Steele Canyon High Schools, using the balance of funds to pay pre-construction costs and "jump start" the program design and construction activities. Based on a cursory review of documents available, it appears the original plan was to begin the repair and modernization projects immediately after assessments had been done and exact project scopes and budgets were known. This was to be followed by the site selection for a new school slated toward the later part of the program's life. This appeared to be a logical sequence of events knowing that school site selection was a

GUHSD Prop H Program Review July 2007

multi-year process. The original anticipated schedule was to complete all projects by the 2011/12 fiscal year.

As required by the Bond Measure's language, the District was also required to conduct annual performance and financial audits and put in place a Citizen's Bond Oversight Committee to oversee all expenditures by the District. The original CBOC was put in place within 60 days by the District and met for the first time in September 2004. The CBOC members were to be volunteers from the community with expertise in finance and construction, members of the business community, student parents, and members of taxpayers' organizations. They were charged with reviewing all performance and financial audits, commenting on all bond measure financial plans, inspecting school facilities and grounds, and finally communicating with the citizens at large and preparing an annual report. During the 2004/05 FY the CBOC met quarterly and from a review of the CBOC meeting minutes, it appears they had very little information to review. The majority of the work that was being conducted during this first year was related to assessments and master plans or construction of deferred maintenance projects not involving Prop H. The CBOC prepared and issued its first annual report in June 2005 with very little construction or budget expenditure detail.

During the period from March 2004 through June 2005 the District expended approximately \$36.6M, primarily on pre-construction assessment and master plan activities with the Master Architect and paying off the COP's. The assessments for the various school sites resulted in a program which was broken down into phases. The first phase of the program; infrastructure projects, was scheduled for construction during the summer of 2005. Modernization phases were scheduled to occur in later years.

Multiple amendment authorizations were given to the Master Architect to prepare bid plans and specifications for infrastructure and modernization projects at Grossmont, El Cajon Valley, Granite Hills, Mt Miguel, Chaparral and Steele Canyon High Schools in June 2005.

2005/06 FY Bond Program Activities

During the 2005/06 FY numerous projects began construction. Major Phase 1 projects consisted of infrastructure upgrades at four schools. During the 2005/06 FY we found that over \$32M of design and construction was put in place including projects funded from state matching funds. The District appeared to have maximized their ability to receive state matching funds, thereby accelerating schedules and utilizing Prop H funds effectively. Additional architects were hired and other projects were being developed for the next cycle of work to be bid for summer 2006 implementation.

GUHSD Prop H Program Review July 2007

In April of 2006, an additional amendment (#2) to the Master Architect agreement was issued to close out previous authorization given to develop plans for modernization projects at four schools at 75% of design completion. The amendment also revised the scopes and budgets for the projects proposed to be bid during July 2006 (these four significant projects were eventually bid in June of 2007). This amendment also added new minor projects to the architect's scope of work.

In June of 2006 an additional \$125.0 M of bonds were sold as the infrastructure projects began construction. Based on a review of documents available, we found that these initial projects had difficulties common to all infrastructure projects, namely unforeseen site conditions which caused cost increases and delays. This, coupled with the revelation that budgets had escalated based on cost increases, became an area of concern.

During this period the CBOC was actively reviewing projects as they unfolded and began asking questions and reviewing budgets. By May of 2006, a website had been developed and put in place, and presentations by the architect and other staff had been made to the CBOC. The "2006 - CBOC Annual Report" contained more detailed information about projects completion, costs, and proposed plans for the future years.

During this period several personnel changes also affected the District. The District Asst. Superintendent of Business Services and the project manager for the District left employment. These positions were eventually filled with a new Deputy Superintendent of Business Services in May of 2006 and an Executive Director of Facilities Management in August of 2006. Both are now in place and actively pursuing commendable progress with the bond program.

Current Status of Bond Program – 2006/07 FY

Upon starting with the District, the new Deputy Superintendent hired a temporary Interim Director for the program until the permanent Executive Director was recruited in August of 2006. He also called for a temporary moratorium on all design work from August 2006 to November 2006 to allow the District to get a handle on programs, budgets, scopes, schedules, and to establish new procedures and processes for project execution. Once the new Executive Director was on board, revised amendments to the Architect's agreement were authorized to allow some work to continue. Additional amendments (#4) to the Master Architect's agreement, while discussed, have not officially been agreed to and have not been executed as of this date. It was originally anticipated that over \$52.7M of construction would be in place during 2006/07. It is now estimated that \$30.3M will be expended.

GUHSD Prop H Program Review July 2007

Meanwhile, during this current fiscal year, modernization projects that have been in design are now being bid for construction starts during the summer of 2007 and several significant adjustments to the program operations are being implemented.

Finding: Overall Program

Based on our research, we feel that the overall program has been reasonably well managed although several areas are in need of improvement. We have addressed each of those areas in various sections of the report as recommendations. Based on a review of documents provided by the District we believe that the District has allocated funds from Prop H adequately to maximize its ability to garner state matching funds on an array of projects. Programming and constructing infrastructure projects, modernization of facilities through renovation, and keeping pace with rising construction costs are all difficult and problematic tasks which the District has thus far managed adequately.

The current major issue facing the District is that several factors have caused the estimated cost of delivering all the projects promised voters in the bond issue, including a new high school, to increase to over \$575.0 M. These cost increases can be attributed to cost escalation, unforeseen site conditions, underestimates of scope, and changes in the scope of projects. We believe that these factors are further complicated by the nature of the unknowns associated with renovation projects in general. Our overall feeling is that the Prop H Bond Program was likely undersized for the number of projects promised the voters prior to the March 2004 voter approval and is the major cause for concern. This is not uncommon for Bond Programs that we have seen in other Districts throughout the State of California.

Bond administrative changes are also currently under development, which will alter the execution of the Prop H Bond program. We concur that revising the Master Architectural Services Agreement and issuing an RFP for Program Management Services are program changes critical to the continued success of the Prop H program and current senior management goals.

Because the Prop H Bond program is complex and undergoing modification as we complete this report, we have made specific comments and recommendations for the overall program. In general, our comments support corrections currently being made by the District.

GUHSD Prop H Program Review July 2007

Finding: Program Management

We found that the prior District management initially believed that the Master Architect or the Construction Manager would fulfill the role of a Program Manager with some minimal oversight by District personnel. We found that neither served that role adequately. There appeared to be no consistent reporting of comprehensive budgets, interface with the CBOC, or rigorous management of the program.

We believe that under the current conditions, with a massive task at hand, a Program Manager should be hired by the District. This Program Manager should report to the Executive Director of Facilities Management who can maintain day to day direction and coordinate reporting to the Governing Board frequently.

In order to assist the District in this endeavor, we propose the following functions for a Program Manager (as distinct from a Construction/Project Manager):

- *Under minimal supervision Program Managers are responsible and accountable for the coordinated management of multiple related projects directed toward organizational objectives. These programs contain complex activities that span functions, organizations, and alliances. Program Managers bring credibility, establish rapport, and maintain communication with stakeholders at multiple levels including those external to the organization. They should work with the District staff and report to the Governing Board frequently.*
- *Program Managers define and initiate projects and assign Project Managers to manage cost, schedule and the performance of projects. They maintain continuous alignment of program scope with objectives and make recommendations to modify the program to enhance effectiveness. They typically have advanced skills in finance, leadership, communications, negotiations, and conflict resolution. As an extension of staff, they keenly focus on making themselves and others accountable to the Board.*

Some of the critical duties which are typically assigned to the Program Manager would be:

- *Develop and manage the program by maintaining a master schedule to insure that all projects will be completed on schedule and within budget.*
- *Maintain a master budget, develop and administer a financial system that reconciles with the District's financial system and develop monthly reports to the Governing Board, CBOC and District.*

GUHSD Prop H Program Review July 2007

- *Provide monthly "look ahead" schedules, forecast change orders and lead value engineering sessions with other consultants.*
- *Coordinate all internal and external communications and act as liaison with the Division of State Architect, other agencies, and the District on all matters related to the program.*
- *Participate in and coordinate the solicitation of all RFP's for consultants, conduct contractor outreach programs and administer/monitor the competitive bid process with District staff.*
- *Assist the District in exploring alternate delivery methods, options to enhance revenues, maintain cash flows, and take a proactive stance as the District moves forward.*

Recommendation 1.1

We concur with District management's decision to issue an RFP for a Program Manager. A Program Manager will bring stability to the overall program and become a point of contact and coordinating body for all activities related to the District's program.

Recommendation 1.2

We recommend that the District review and revise the scope of work assigned to the Master Architect and the Construction Manager to more clearly define their roles in the process.

Finding: Policies and Procedures

In our research, we reviewed the Draft Construction Management Manual prepared by Erickson-Hall. While the manual contained operational procedures typical for construction we found no evidence in the manual that there were policies and procedures in place which defined the roles of individuals, firms, or District personnel in the construction process particularly tailored to the District's needs. Currently the District is utilizing the School Facility Program Handbook prepared by the California Office of Public School Construction as well as this document as the operative manual. A well defined program relies on each player understanding their role, especially those unfamiliar with construction in general. Normally a policies and procedures document or Program/Project Manual is designed as a planning and operational tool to allow all stakeholders to have input into the construction process and to define paths of communication to successfully complete a project or program. A successful program requires that these areas be defined:

GUHSD Prop H Program Review July 2007

- *The organization of the program management team and the roles of each player, including how they interface with the District.*
- *Program administration including financial administration and control of documentation throughout the life of the program.*
- *How the players interface with the Governing Board, CBOC and public at-large.*
- *Internal processes, by which the projects will be individually managed, designed, bid and constructed.*
- *The change order procedures, authority approval levels for expenditures and ultimate budget controls.*
- *Project close-out requirements, training and delivery of as-built drawings.*

And finally, we believe that a project/program and procedures manual should be reviewed and revised annually as the program evolves since we recognize laws, procedures, and processes are constantly changing.

The Program/Project Manual can become an effective tool toward understanding how the District will manage projects and become financially accountable. It can also be used to train staff and particularly the CBOC on various facets of the construction process. Educating the stakeholders, public, and others provides a transparent process which can be used to build accountability.

Recommendation 1.3

When the Program Manager has been hired we recommend that the District consider reviewing and updating the Program/Project Manual which builds on the current School Facility Program Handbook and the Construction Management Manual and addresses our concerns about how projects are managed and organized at the District level.

Finding: Financial Reporting

We found that District project reports were difficult to follow on the older projects we reviewed. Specifically, some past reports identified projects with specific project descriptions. Others reported expenditures by bond elements (i.e., utilities, portable classrooms, etc.) and did not identify school sites. Some reported projects by phases or location with little or no project detail.

We also found it difficult to reconstruct actual budgets from inception to completion such that we could track variances in cost over time. The scope of projects was sometimes mixed with other work and could not be followed closely. Since cost escalation and the erosion of the available bond funds are of great concern, a project tracking system would

GUHSD Prop H Program Review July 2007

be of great value. It should contain all information and be keyed to allow a reader to follow a project from inception to completion.

Based on a review of current projects we understand that a new financial tracking system has been developed which currently results in better reporting.

Consistent reporting models will also provide overall project consistency and make District reporting more easily understandable for stakeholders. Further, this should give the District more credibility with outside reviewers and improve general accountability with the public.

Recommendation 1.4

We commend the District on developing a standardized reporting model that shows all components of expenditures and encompasses all reporting needs for District management, accounting, CBOC, and Board needs. All projects should be listed with consistent titles, include budgets (both initial and current), schedules, and comprehensive information that are easily readable. This system can be monitored and updated as part of the duties assigned to the Program Manager.

Finding: Communication/Reporting

In all our research of documents and web sites we found scant evidence that, prior to the current management, the District was communicating the status of individual projects, budgets, schedules and the overall program effectively to stakeholders. An effective bond program establishes lines of communication between stakeholders, the general public, the CBOC and the Governing Board such that all are informed and involved in the decision making process. It is important to develop a proactive rather than a reactive communication tool.

We understand that the District has issued an RFP for the selection of a consultant to work with the CBOC to improve communications and to provide assistance in updating their web site. Getting accurate financial and project status information will be helpful. Making the website information that is available to the public more transparent will also improve the process. This work can be done by the Program Manager or another consultant.

GUHSD Prop H Program Review July 2007

Recommendation 1.5

We recommend that the District strengthen the communication with all stakeholder groups delivering information about project status with monthly reports, both financial and informative, through development of a web site that is easy to use and provides for public input and comment. Special quarterly "state of the program" status meetings may also be helpful to communicate with the public.

GUHSD Prop H Program Review July 2007

SECTION 2: DESIGN TEAM COSTS AND REASONABLENESS OF FEES

As part of the annual review, we were asked to address the design team costs and to assess whether fees were reasonable. Were the design team costs as a percentage of construction consistent with industry standards? Were design team members responsible for errors and omissions?

As part of our review we examined the following documents:

- *Original Master Agreement for Architectural Services with HMC Architects, dated July 8, 2004*
- *Amendment #1 to Owner/Architect Agreement, dated June 6, 2005*
- *Amendment #2 to Owner/Architect Agreement, dated April 6, 2006*
- *Amendment #3 to Owner/Architect Agreement, dated October 6, 2006*
- *Amendment #4 to Owner/Architect Agreement, dated December 7, 2006*
- *Various HMC Architects Invoice Summaries prepared by the District accounting staff for Assessment Services, Master Planning Analysis, Modernization Projects, Labor Compliance, State Funded Program and other architectural services from July 2004 thru December 2006*
- *Various Extra Service Authorization letters issued to HMC Architects by the District from October 2005 to the present.*

Since we were also charged with examining, in detail, two specific completed projects drawn at random we also looked at the following:

- *Architectural agreement between the District and Harley Ellis Devereaux Architects (HED) for the GUHSD – Utility Infrastructure Upgrade Projects at Santana High School, a portion of a larger agreement covering three high schools with similar work, dated November 22, 2005*
- *Architects fee reconciliation letter, dated July 28, 2006*

Contract Format

The original Master Architectural agreement between HMC Architects and the District, dated July 8, 2004, contained the standard provisions of an architectural agreement. Unique to this agreement were provisions to provide services beyond the basic architectural services normally reserved for projects. The agreement added the following comprehensive services with a “not to exceed” compensation based on an attached hourly fee schedule:

GUHSD Prop H Program Review July 2007

Contract	Description	Amount
4.1 a.	Assessment 9 schools @ \$60,000 maximum	540,000.00
4.1 b.	Assessment 12 schools @ \$30,000 maximum	360,000.00
4.3.1 A	Eligibility Review - initial State Funding Plan	18,000.00
4.3.1 A	Eligibility Review - annual	6,000.00 per year
4.3.1 B	Update Project Funding Plan - annual	9,000.00 per year
4.3.1.C	Project Tracking - modernizations	12,000.00 per year
4.3.1.C	Project Tracking - new construction	15,000.00 per year
4.5.1	Educational Specifications	75,000.00 max
4.5.1	District Material & Design Standards	35,000.00 max
4.6.1	<u>Labor Compliance</u>	SAB Scale per contract
4.6.1 1	Pre-Bid Phase	5% Fee
4.6.1 2	Pre-Construction Phase	5% Fee
4.6.1 3	Construction Phase	80% Fee
4.6.1 4	Annual Reporting/Ongoing assistance	10% Fee
4.7	High Performance School Design	50,000.00 max

Each of the above additional services had a scope of work defined in detail and attached to the contract as Exhibits A- G. Two additional attachments listed the hourly rate schedules for HMC and an Architect's Fee Schedule for new construction and renovation as would be used on a normal architectural contract.

Finding: Architectural Agreement

We believe the initial Master Architectural Agreement was intended to be a comprehensive scope of work for the entire bond program's start-up activities and charged the Architect with including comprehensive program management activities normally reserved for District personnel or Program Management firms. For instance, the assessment services phase required the Architect to develop site master plans for each school site, assess existing conditions, develop cost estimates, develop master schedules, prepare cash flows, and participate in site selection and CEQA reviews with the District. Labor Compliance while not normally an architectural service was also provided for projects as well as State Funding Program assistance under the master contract.

Unique to architectural contracts are definitions which fix the scope, budget and schedule for a specific project and specifically the time line for delivery of architectural documents. The Master Architectural Agreement that was utilized defined the entire scope of work anticipated for the bond program; however, since assessments, schedules, and cost estimates were not known, it did not define specific time lines for the architect's performance (no deadlines for delivery of documents and tasks). Since this agreement was intended to be a master architectural agreement with various task order authorizations issued as projects were defined and approved by the Governing Board, we

GUHSD Prop H Program Review July 2007

reviewed various authorization letters to see if the schedules and budgets were defined when task order authorizations were issued by HMC. We found none.

Further we reviewed the standard form of agreement for Architectural Services between HED and the District for Phase 1 and Phase 2 modernizations at El Capitan, Monte Vista, and Santana High Schools (contract A-5330). Nowhere in the agreement is there specific language which defines the timeline for either completion for the various phases of the Architect's work or the exact budget for the project.

We understand that the District is in the process of revising the Master Architectural Agreement and other standard forms of Architectural Agreements.

Recommendation 2.1

We recommend that the District consider adopting a contract format which clearly defines the scope, budget and schedules for projects. If the District utilizes a master agreement format with task orders issued subsequent to the master agreement, then the task order authorizations or the main agreement should contain the following elements:

- *A scope of work developed and issued by the District rather than the Architect*
- *A statement of the anticipated budget indexed to the CCCI or other standard as a benchmark to measure performance*
- *Sections defining the role of the architect in relation to other consultants (Program Manager, Construction Manager), and any and all District design standards to be incorporated into the design of the project*
- *Definition of timelines for deliverables at each phase of the work (schematic, preliminary, working drawings)*

Recommendation 2.2

We recommend the District separate basic architectural service agreements for project design and construction activity from lump sum authorizations and set limits for lump sum agreements for specialized services.

Architectural Fee Structure

We reviewed the architectural fee structure adopted by the District. The following table illustrates the design fee structure as adopted by the District:

GUHSD Prop H Program Review July 2007

Design Fee Schedule - new construction	1,250,000.00	9%	112,500.00
	2,500,000.00	8.5% additional 1,250,000	106,250.00
	5,000,000.00	8% additional 2,500,000	200,000.00
	15,000,000.00	7% additional 10,000,000	700,000.00
	25,000,000.00	6% additional 10,000,000 5% any additional	600,000.00
Design Fee Schedule - modernization	1,250,000.00	12%	150,000.00
	2,500,000.00	11.5% additional 1,250,000	143,750.00
	5,000,000.00	11% additional 2,500,000	275,000.00
	15,000,000.00	10% additional 10,000,000	1,000,000.00
	25,000,000.00	9% additional 10,000,000 8% any additional	900,000.00
** Fee remuneration schedule based on Architect's estimate at the time of DSA Approval.			

Unique to the fee structure is the basis by which the Architect is compensated. Section 1.15 of the Master Architect Agreement and Section 4.1.2 of the HED standard form of architectural agreement define the project construction cost to be utilized to compute the architect's fee as "the sum of all awarded bids plus the general conditions costs and construction manager's fee."

Finding: Fee Schedule

Based on the two projects we reviewed we find the fees to be comparable to architectural fees paid by other institutions for similar work.

Recommendation

None

Finding: Contract Language

Upon review of the contract language used to establish the architect's fee, we believe the District should consider adopting a more stringent philosophy concerning control of the budgeted architect's fee. For instance, in one case we reviewed where the work was terminated at 75% completion, the Architect's compensation was determined by adding the budget (as determined by the architect's estimate) to a forecasted general conditions cost (maximum 8% by contract with the Construction Manager) plus a forecasted fee based on the total of the estimate plus the general conditions (also determined by contract with the CM at 5%) to arrive at a total projected budget. Their fee was then calculated, by contract, based on the sum of these numbers. Even though the General

GUHSD Prop H Program Review July 2007

Conditions cost and fee for the work may have been less when the work was actually bid and performed, the architect was compensated a maximum fee according to the contract.

There were also other examples where we found the Architect's fee was in a constant state of flux. As budgets increased there was a commensurate increase in the architect's fee. As projects were completed, re-scoped or reached various phases, there were adjustments made to the architect's compensation. And finally, the exact amount of the fee was not known and could not be forecasted until the project was bid and under construction. Even then, a maximum CM fee and General Conditions may have been forecasted to arrive at the fee. In our opinion it is a complicated task to adequately budget for a project when fees are not completely known until project completion.

Recommendation 2.3

We recommend that the District, in consultation with legal counsel, review the contract language and modify the fee structure such that ambiguous interpretations, calculations and adjustments to the fee are more certainly fixed. Even though there are pros and cons to the current methods used we would recommend that the fees be fixed at the working drawing stage rather than at bid and that the projected allowable General Conditions and CM Fee be likewise fixed in the contract. In the case where projects are suspended and then re-started there should also be an agreed upon re-start fee.

Extra Services/Lump Sum Authorizations:

Normally extra services paid to the architect are those fees necessary to cover additional work as authorized by the Owner over and above the basic services as defined by contract. Since the architect's agreement with the District was a Master Enabling Agreement, with provisions for task orders to be assigned by the District, numerous project related activities were done as lump sum authorizations.

In the case of the assessments, which were lump sum agreements, we have attached the following table showing expenditures and percentage of completion on those tasks as of this date:

GUHSD Prop H Program Review July 2007

ASSESSMENT SERVICES					
	Maximum Allowable	Total billed	Remaining balance	% Billed Assessment	% Billed Reimb
Grossmont (Assessment)	60,000.00	60,967.50	(967.50)	102%	7%
Reimbursables		4,499.83			
Helix (Assessment)	60,000.00	76,402.00	(16,402.00)	127%	7%
Reimbursables		5,438.80			
El Cajon (Assessment)	60,000.00	64,942.50	(4,942.50)	108%	6%
Reimbursables		3,887.58			
Mount Miguel (Assessment)	60,000.00	55,754.50	4,245.50	93%	7%
Reimbursables		4,043.58			
El Capitan (Assessment)	60,000.00	10,277.50	49,722.50	17%	38%
Reimbursables		3,887.58			
Granite Hills (Assessment)	60,000.00	58,457.00	1,543.00	97%	3%
Reimbursables		1,523.95			
Monte Vista (Assessment)	60,000.00	13,445.00	46,555.00	22%	29%
Reimbursables		3,887.58			
Santana (Assessment)	60,000.00	11,335.00	48,665.00	19%	34%
Reimbursables		3,887.58			
Valhalla (Assessment)	60,000.00	7,802.50	52,197.50	13%	54%
Reimbursables		4,247.58			
West Hills (Assessment)	30,000.00	4,447.50	25,552.50	15%	44%
Reimbursables		1,971.95			
Steele Canyon (Assessment)	30,000.00	20,283.75	9,716.25	68%	22%
Reimbursables		4,491.95			
Chaparral (Assessment)	30,000.00	24,513.25	5,486.75	82%	33%
Reimbursables		8,116.67			
Homestead/Frontier (Assessment)	30,000.00	17,522.50	12,477.50	58%	1%
Reimbursables		160.00			
Viking (Assessment)	30,000.00	320.00	29,680.00	1%	0%
Reimbursables		-			
Work Training (Assessment)	30,000.00	13,777.00	16,223.00	46%	0%
District Office (Assessment)	30,000.00	575.00	29,425.00	0%	0%
HOC (Assessment)	30,000.00	215.00	29,785.00	1%	0%
Foothills (Assessment)	30,000.00	-	30,000.00	0%	0%
M&O + Transp (Assessment)	30,000.00	1,090.00	28,910.00	4%	71%
Reimbursables		773.38			
Career + ROP (Assessment)	30,000.00	-	30,000.00	0%	0%
ROP Truck Driving (Assessment)	30,000.00	1,300.00	28,700.00	4%	0%
Total Fees Paid		494,245.51			
Base Fees	900,000.00	443,427.50	456,572.50	49%	
Reimbursables		50,818.01			11.46%

Finding:

It is unclear if the assessment work, as authorized, has been completed. As evidenced by the table, the Architect made significant progress toward completing the assessments at several of the schools. We also note, that while it appears that the basic assessments were completed within six months of the original agreement, sporadic work continues on assessments, seemingly ad hoc.

GUHSD Prop H Program Review July 2007

We also noted that reimbursements, while authorized by the original contract, seem to be charged at significantly variable percentages at each school and that some assessment allowances have been over billed in excess of the contract sums allowed.

We currently understand that the District is in the process of revising the Master Architectural Agreement and is anticipating revising the practice of issuing lump sum authorizations.

Recommendation 2.4

The District should verify if assessments have been completed for each school, and if complete, close out that portion of the contract. As it stands, there may be encumbrances or open contract sums which can be unencumbered and returned to the District as savings.

Recommendation 2.5

The District should review the reimbursements charged to each school assessment such that they can accurately capitalize the expenditure and account for the cost associated with each school site.

GUHSD Prop H Program Review July 2007

SECTION 3: CONSTRUCTION MANAGEMENT SERVICES

As part of our review we were asked to address consultant fees and assess whether they were reasonable. We normally look at all consultants combined in an individual project analysis including the construction management fees assigned to each project. Many Owners hire construction management services on a project by project basis but since Grossmont Union HS District decided to hire one CM for the entire program, we felt it important to segregate our comments and provide comments on the CM service as a separate section.

As part of our review we conducted an in-depth review of the construction management contract and costs to determine their reasonableness. Were the cost percentages consistent with industry standards? Were invoices sufficiently detailed? Did the fees paid compare reasonably to fees paid by other District's bond measures?

As part of our research we examined the following documents:

- *Erickson-Hall Construction Co. Program Manager (PM)/Construction Management (CM) Services Agreement, dated July 8, 2004*
- *Erickson-Hall Schedule of Fees for CM Fees and General Conditions*
- *Erickson-Hall invoices*

Contract Format – Program Management

The Erickson-Hall contract for Contract Management/Program Management services, originally authored in July 2004, detailed the scope of services to be performed for the Proposition H program. The following is a table of the services included in the CM/PM Service Agreement as Program Management services:

GUHSD Prop H Program Review July 2007

DEVELOP:	NTE Fee
1.1.1 Master Implementation Schedule	35,200
1.1.2 Project Budgeting	55,000
1.1.3 Project Updates (budget, schedule, scope, etc.)	10,000
1.1.3 Procedures Involving District, Consultants & Contract	87,250
1.1.4 Consultant Selection	
1.1.5 Modernization Plan	23,500
1.1.6 Interim Housing Plan	23,500
	234,450
ASSIST:	
1.1.7 Feasibility of Land Parcels	
1.1.8 District Standards & Design Guidelines	23,500
1.1.9 Site Change Impact	
1.1.11 Bond Oversight Committee Meeting Prep	23,500
1.1.12 Budget Workshops	23,500
1.1.13 Modernization Plan - Repair/replace Cost	62,500
1.1.14 Utilities Analyses	62,500
	195,500
1.1.15 Education & Site Based Community Usage	195,500
PROVIDE:	
Executive Director and AA to oversee/coordinate the Program Thru December 2004	230,880
	660,830

Finding:

Generally, we found hourly rates charged by Erickson-Hall to be reasonable compared with other bond programming costs at Districts with similarly complex programs.

The initial term of the contract for the Preconstruction/Programming Services indicated these activities were to be complete by December 2004. We did not find costs associated with those services described under DEVELOP or ASSIST. We reviewed "programming" invoices submitted by Erickson-Hall (limited to those services described under PROVIDE above) for an Executive Director. Following is the total cost for this service:

Month	J. Vincent	D. Erickson	M. Gates/D. Davenport	Asst.PM/CM	Superintendent	Total
Jun 2004	1,336.00					1,336.00
Jul 2004	27,305.00					27,305.00
Aug 2004	29,225.50	1,640.00				30,865.50
Sep 2004	27,305.00	5,330.00				32,635.00
Oct 2004	17,786.00					17,786.00
Dec 2004		2,460.00	10,295.00		8,750.00	21,505.00
Feb/Mar 2005			39,948.00	2,880.00	24,250.00	67,078.00
Totals	102,957.50	9,430.00	50,243.00	2,880.00	33,000.00	198,510.50
					Contract	230,880.00
					Balance	32,369.50

GUHSD Prop H Program Review July 2007

Recommendation 3.1

For accounting purposes, we suggest an amendment to close out the costs for the Executive Director that has an open balance of \$32,369.50. Additionally, the amendment should reflect actual completion for this service through March 2005.

Recommendation 3.2

Even though the GUHSD management (at the time the contract was executed) intended that Erickson-Hall provide all services listed, we recommend that the agreement should be modified to accurately reflect services provided. We recommend that current management take this opportunity to amend the services agreement to eliminate those tasks identified under "DEVELOP" and "ASSIST" as these were not provided by Erickson-Hall and likely will not be necessary.

Contract Format – Construction Management

The Services Agreement provided a cost for Construction Management and General Conditions. It was based on the following:

CONSTRUCTION MANAGEMENT FEES:	
Construction Management Fee	5% of Construction Costs Incl. Change Orders
General Conditions	NTE 8% of Construction

Finding:

We performed a detailed analysis of how fees for Construction Management and General Conditions were calculated and the amount paid for each. In order to gain a more complete picture of these fees, we limited our analysis of Prop H projects to those included in Phase 1 and 2A. As reflected below, the actual General Conditions costs averaged 5.31% for Phase 1 and 3.71% for Phase 2A rather than the 8% maximum allowed. We can attribute this drop in cost to closer scrutiny under the current District's leadership over the past months, and a periodic request for detail from Erickson-Hall to support their General Conditions charges which has recently been instituted.

The following table also identifies reimbursable expenses shown as "Expenses." We did not find contractual terms in the CM agreement that identified what constituted "reimbursable expenses." From our on-site interviews, we gathered that reimbursable costs included minor construction expenditures for various schools and the Erickson-Hall

GUHSD Prop H Program Review July 2007

site set-up costs. We did not find contract language that addressed allowable "reimbursable costs." Following are the Phase 1 and 2A fee analyses:

	CM/GC Fees			CM/GC Billed				Expenses
	Final Constr Contract	GC 8%	CM Fee 5%	CM Fee Billed	CM Fee Comp	GC Billed	Actual % of Const	
Eirckson Hall - Phase 1 Projects								
05-16550 Grossmond Infra	2,743,311.81	219,464.94	148,138.84	148,138.84	100.00%	219,025.54	7.98%	22,126.50
05-16550 Helix Infra	3,874,393.00	309,951.44	209,217.20	209,217.20	100.00%	235,581.66	6.08%	44,805.97
05-16550 El Cajon Infra	7,043,177.23	563,454.18	380,331.57	380,331.57	100.00%	379,158.43	5.38%	188,250.56
05-16550 GraniteHills	4,949,566.00	395,965.28	267,276.56	267,276.56	100.00%	222,276.56	4.49%	31,363.20
05-16550 West Hills Fire Alarm & Lighting	239,000.00	19,120.00	12,906.00	12,906.00	100.00%	14,733.43	6.16%	715.00
05-16550 Roofing Mult Facilities	927,128.00	74,170.24	50,064.91	50,064.91	100.00%	65,064.91	7.02%	10,106.25
05-16550 Canopy Demo Multiple	106,200.00	8,496.00	5,734.80	5,734.80	100.00%	8,019.20	7.55%	
05-16550 Roofing Mult Facilities	606,050.00	48,484.00	32,726.70	32,726.70	100.00%	9,165.46	1.51%	4,763.00
05-16663 Mt.Miquel	1,219,243.00	97,539.44	65,839.12	65,839.12	100.00%	15,011.26	1.23%	40,822.10
06-03194 Chaparral	444,341.50	35,547.32	23,994.44	23,994.44	100.00%	8,643.52	1.95%	-
Totals	22,152,410.54	1,772,192.84	1,196,230.14	1,196,230.14		1,176,679.97	5.31%	342,952.58

	CM/GC Fees			CM/GC Billed				Expenses
	Current Rev Cont	GC 8%	CM Fee 5%	CM Fee Billed	CM Fee Comp	GC Billed	Actual % of Const	
Eirckson Hall - Phase 2A								
Monte Vista Infrastructure	7,728,733.00	618,298.64	417,351.58	415,264.82	99.50%	297,836.21	3.85%	5,461.39
El Capitan Infrastructure	7,530,697.00	602,455.76	406,657.64	404,624.35	99.50%	232,192.39	3.08%	270.05
Santana Infrastructure	6,255,983.58	500,478.69	337,823.11	336,134.00	99.50%	221,881.06	3.55%	9,909.54
Grossmont Program Distric Wide		38,061.21						114,211.38
Helix Infrastructure Phase 2A	1,369,186.00	109,534.88	73,936.04	73,936.04	100.00%	58,919.80	4.30%	17,879.05
Security Cameras Phase 1	783,402.00	62,672.16	42,303.71	42,303.71	100.00%	26,815.19	3.42%	1,071.75
WHHS, SCHS, VHS, GHS Video Sur	641,038.12	51,283.05	34,616.06	34,616.06	100.00%	23,587.73	3.68%	
Security Cameras Phase 3	783,053.00	62,644.24	42,284.86	41,227.74	97.50%	27,353.92	3.49%	
Lunch Shelters @ ECVHS & GHHS	206,309.00	16,504.72	11,140.69	10,026.62	90.00%	3,392.41	1.64%	1,892.00
Lunch Shelters @ CHS, HHS, GHS	418,146.00	33,451.68	22,579.88	22,579.88	100.00%	14,271.79	3.41%	
GHS, GHHS, VHS, MMHS Bleachers	480,418.00	38,433.44	25,942.57	21,208.05	81.75%	7,388.63	1.54%	
ECVHS/GHHS Interim Housing	840,594.59	67,247.57	45,392.11	45,392.11	100.00%	54,564.13	6.49%	22,990.89
Helix/Gross HS - Interim Housing	1,220,158.43	98,092.67	66,212.56	66,212.56	100.00%	34,157.40	2.80%	14,546.68
Helix/Gross HS - Lndscp Restoration	392,174.00	31,372.92	22,563.14	21,177.40	93.86%	18,996.76	4.84%	2,838.00
ECVHS/GHHS Landscape Restoration	800,328.00	64,026.24	43,217.71	43,217.71	100.00%	32,992.17	4.12%	
El Cap Site & Lnds Restoration	756,457.00	60,516.56	40,848.68	38,193.51	93.50%	30,080.76	3.98%	
MVHS Site & Landscape	678,937.00	54,314.96	36,662.60	30,979.90	84.50%	36,886.99	5.43%	
Santana Site & Land	660,549.00	52,843.92	35,669.65	33,351.12	93.50%	39,242.24	5.94%	3,746.60
Grossmont Power Upgrade	1,126,626.00	90,130.08	60,837.80	60,837.80	100.00%	36,768.63	3.26%	
Grossmont HS Transportation Power	388,529.00	31,082.32	20,980.57	20,980.57	100.00%	25,194.13	6.48%	
SCHS Field Upgrade/ECVHS Bckstop	565,603.00	45,248.24	30,542.56	30,542.56	100.00%	10,239.81	1.81%	
WTC & ADA Compliance Upgrades	333,087.00	26,846.96	17,986.70	17,986.70	100.00%	26,523.56	7.96%	4,729.56
Totals	33,960,008.72	2,755,340.91	1,835,550.22	1,810,793.21	98.65%	1,259,285.71	3.71%	199,546.89

Recommendation 3.3

Bond Management may want to consider lowering the 8% General Conditions allowance as a result of our analyses of actual costs billed by the CM. For the Phase 2A projects, actual costs were less than half of the NTE allowance.

GUHSD Prop H Program Review July 2007

In general, we found that the 5% CM fee was reasonable and competitive for the current projects. This contract arrangement is known as CM-Agent, where the CM is not at risk but acts as an agent for the Owner, securing bids and managing the course of the work. We normally find Construction Management fees in the range of 7.5% to 15.0% including General Conditions. Since this agreement is for the CM to act as the District's agent, not at risk, we would anticipate the total fee to be slightly less than the maximum. The actual total CM costs are ranging from approximately 9% to 11% for the program thus far. This is toward the lower end of the scale and is an excellent value for the program.

Finding:

Erickson-Hall is currently underway with the Phase 2B Modernizations. We did receive and review the June 2007 trade bids recently received for Grossmont and El Cajon High School Modernization and found that the April 2007 CM invoices were obviously not reconciled to these amounts. For Grossmont, the bids received totaled \$5,425,279 and for El Cajon they totaled \$6,351,688. Erickson-Hall fees are based on estimates of \$5,435,294 and \$5,639,848, respectively.

Recommendation 3.4

GUHSD should confirm that Erickson-Hall's Phase 2B fees are reconciled once the trade contracts are executed.

Recommendation 3.5

We suggest that "reimbursable costs" be more clearly defined in the contract

In conclusion, we find the Erickson-Hall CM fee reasonable for those projects completed. However, the District may want to consider a sliding scale for larger projects and the potential use of multiple CM firms. The District may also want to consider alternate delivery methods, such as CM at Risk. While we cannot guarantee that savings to the program may accrue, alternate methodologies may in fact, reduce the burden of project management and minimize change orders, eventually saving bond funds.

General Conditions Charges

Although we did not perform a comprehensive review of charges submitted by Erickson-Hall for GC costs, we were able to sample several invoices and found some costs to be outside the allowable costs typically considered General Conditions for a project.

GUHSD Prop H Program Review July 2007

Finding:

Further, as part of the requirements of the CM contract Article 4.2.2 "General Conditions costs must be supported by an invoice, receipt, an employee time sheet, or other acceptable documentation." We did not find that the District enforced this requirement in the past although current management has requested detail for charges presented on more recent invoices.

Recommendation 3.6

We suggest that the District require the CM to furnish complete support for all General Condition costs as required by contract.

Finding:

Additionally, we found that a consultant provided sub-consulting services through Erickson-Hall. These were included in General Condition or reimbursable costs. The four invoices we have on file indicate the work was related to Implementation for Master Plans at various schools. Following is the total for these costs:

Month	Hours	Rate	Invoice
Jan, 2006	126	75	9,450.00
Dec, 2005	108	75	8,100.00
Nov, 2005	103	75	7,725.00
Oct, 2005	81	75	6,075.00
Sep, 2005	49	75	3,675.00
Aug, 2005	<u>52</u>	<u>75</u>	<u>3,900.00</u>
Total	519	75	38,925.00

Recommendation 3.7

We suggest that current GUHSD management implement a policy of approving the use of sub-consultants to the CM firm when costs are significant, as in the case of the above example. Further, the District should confirm where these items were charged and in the future approve the use of the sub-consultant by receiving a detailed scope of services the consultant will provide.

GUHSD Prop H Program Review July 2007

SECTION 4: TWO SELECTED PROJECT ANALYSES

As part of our review we were asked to examine two projects and address the fees paid to the architect and other consultants/service providers and verify that the rates quoted are reasonable as a percentage of total project costs. Costs for inspectors, soil investigation, requests for additional services and change order rates were examined by tracking invoices. We also looked at these two projects to see where constructability reviews and value engineering may have been applied and any other evidence that suggestions as a result of value engineering not only saved cost but maintained the integrity of the design quality and standards anticipated by the District.

After review of the entire completed projects list the following two completed projects were selected at random for inspection:

- *Santana High School Infrastructure – Wet Utilities*
- *El Cajon Valley & Granite Hills High School – Site & Landscape Restoration*

As part of our research we inspected the following documents:

Santana High School Infrastructure:

- *Architectural Agreement between the District and Fields Devereaux Architects, dated February 8, 2005*
- *Architect's fee proposal letter, date November 22, 2005, with a scope of services to encompass utility infrastructure upgrades at three campuses: El Capitan, Monte Vista and Santana High Schools*
- *Constructability Review Comments, dated December 19, 2005*
- *Notice of Award to Ranbar Plumbing, dated May 19, 2006*
- *Contract between the District and Ranbar Plumbing, dated May 22, 2006 for the construction of Infrastructure – Phase 1: Wet Utilities at Santana High School.*
- *Notice to Proceed, dated May 31, 2006*
- *Architect's fee reconciliation letter, dated July 28, 2006*
- *Applications & Certificates of Payment, from 5/31/05 through 1/31/07*
- *Contractual summary expenditure reports prepared by the District*
- *Notice of Completion, dated 1/11/07*

El Cajon Valley & Granite Hills High School – Site & Landscape Restoration:

- *Authorization Letter for Additional Services, HMC Architects, for El Cajon Valley HS Quad Area Design, dated December 13, 2005*

GUHSD Prop H Program Review July 2007

- *Authorization Letter for Additional Services, HMC Architects, for Granite Hills HS, dated March 14, 2006*
- *Contract between the District and 3-D Enterprises, Inc. for the Landscape Restoration at El Cajon Valley and Granite Hills HS, undated*
- *Notice to Proceed, dated July 25, 2006*
- *Applications & Certificates of Payment from 8/31/06 to 12/31/06*
- *Change Orders #1 through #12, dated November 13, 2006*
- *Contractual Summary expenditure report prepared by the District*
- *Notice of Completion, dated 11/27/06*

Other documents reviewed consisted of contracts between the District and two (2) materials testing firms, two (2) inspection firms and two (2) hazardous materials consulting firms.

Architectural Services

Wet Utilities at Santana High School: Phase 1 Infrastructure

We began our analysis by first examining the architectural agreement between the District and the Architect, Fields Devereaux Architects. Based on the formal agreement issued to the architect, the scope of work was to prepare Phase 1 and Phase 2 infrastructure and modernization work at El Capitan, Monte Vista and Santana HS. A subsequent scope of work letter issued by the architect on November 22, 2005 narrowed the scope of work to Phase 1 infrastructure work at each school. The architect provided a "thumbnail cost estimate" to calculate his fee. We were tracking only that work as completed for the Santana HS Wet Utilities Infrastructure which was to be completed as a separate bid package, however we reviewed the overall fee structure as well.

The following table summarizes the architect's fee calculations based on the bids received:

GUHSD Prop H Program Review July 2007

Santana Infrastructure			
Original HED letter dated 11/22/05	Const. Est. 4,604,600	A/E Fee 475,400	
	<i>Included 15% for CM Fee & GCs - should be 13%</i>		
Actual Bids recorded per EH	6,901,302	653,410	
	<i>Fee calculated using 6% mark-up for CM</i>		
Bids			A/E Allocation
General Building	589,000	9.71%	63,477
Wet Utilities	3,240,000	53.44%	349,175
Electrical	2,234,000	36.85%	240,758
	6,063,000	100.00%	653,410
C-M OH&P (Est) 6%	363,780		
	6,426,780		
A/E Fee Schedule as presented	500,000	12%	60,000
	500,000	12%	57,500
	1,000,000	11%	110,000
	4,000,000	10%	400,000
	426,780	9%	38,410
	6,426,780		665,910

Finding:

We found that the original architectural contract was vague as to subsequent work to be completed in Phase 2 suggesting only, "other prioritized bond measure identified scopes of improvements as directed and funded by the District".

We have commented in other sections of this report about the lack of clarity in the basic agreement as to the budget for the work. Lacking a stated budget, we found that the architect was seemingly in charge of determining the budget for the work and lacking a budget, created his own estimate in order to establish his fee. His estimated cost of the entire Santana HS Infrastructure work was \$4,604,600 in November 2005 including an estimate for escalation and the CM Overhead and Profit. The Architect estimated his fee at \$475,400. As noted in the table above the fee calculation included a 15% OH&P estimate for the CM when the actual CM fee was not to exceed 13%.

It is also unclear to us whether this was the scope of work as bid since bids that were received for the entire Infrastructure work at Santana were \$6,426,780 when bids were received in April 2006. There appears to be no documents which explain the approximately \$1.8 M increase from the original estimate. Further, when bids were received, the architect adjusted his fee based on the actual bids and reconciled his fee to

GUHSD Prop H Program Review July 2007

\$653,410 based on the contract. In this estimate he utilized a 6% fee for the CM, less than the actual maximum allowed by contract.

When we continued to check his fee calculation based on the contract sum and the approved fee schedule we found that he also miscalculated his fee based on the contract. As noted above the actual fee should have been \$665,910.

We also looked at District records to see how the fee may have been apportioned to the individual projects. As noted above, if the District allocated the fee based on a proportional method, the District accounting records would have carried \$349,175 as the correct sum for the Wet Utilities at Santana HS. The District records show only \$150,000 allocated to this project.

Recommendation 4.1

We recommend that the District reconcile its records to more clearly apportion the fee to the projects for accounting purposes. As commented on in other sections of this report, we also recommend that the District review the fee and clear up any ambiguities.

El Cajon Valley & Granite Hills HS: Site & Landscape Restoration

On December 13, 2005 the District authorized the preparation of bid documents by HMC Architects for the El Cajon Valley HS Quad Area Design, as an additional service to the Master Architect's agreement. The estimated fee for this work included sub-consultants for landscaping and civil engineering work as well as HMC's work for a contract sum of \$27,975.

On March 14, 2006 the District entered into a similar extra service contract with HMC to prepare bid documents for the Granite Hills HS Quad Area Design for a contract sum of \$30,763.

Finding:

We found no statement as to the budgets for these projects within the architect's agreement or extra services agreement.

Since we found no records, we do not know if the architect adjusted his fee at the acceptance of the bids and award of the contract but assume that similar adjustments were made.

GUHSD Prop H Program Review July 2007

Recommendation 4.2

As previously commented on in other sections of this report, we recommend that the District revise the architectural contract, in consultation with legal counsel, to clearly define the budget for the project and eliminate ambiguities regarding the basis for the architect's fee.

Inspection, Materials, Testing, and Other Services: Both Projects

In order to track the work being performed by other consultants on the Wet Utilities at Santana HS and the Site & Landscape Restoration at El Cajon Valley & Granite Hills HS we prepared the following charts to be able to comment on whether the fees were reasonable and appropriate:

Santana Wet Utilities (Part of Santana Infrastructure)

	Actual FY2006	Actual FY2007	Actual to Date	% Construction
Construction	1,239,030.00	2,245,835	3,484,865.00	
CM Fees **	<u>68,385.46</u>	<u>181,177.79</u>	<u>249,563.25</u>	7.16%
Construction + CM Fee Total	1,307,415.46	2,427,013	3,734,428.25	
Design	82,629.81	81,668.85	164,298.66	4.40%
Testing		64,171.99	64,171.99	1.72%
Hazard Materials Testing	-	699.03	699.03	0.02%
IOR	-	23,747.90	23,747.90	0.64%

*** The CM fees represent 43.94% of the total paid Erikson-Hall on the total Infrastructure Project.*

GUHSD Prop H Program Review July 2007

El Cajon HS & Granite Hill HS *(includes Lunch Shelter Quads)*

	Actual FY2006	Actual FY2007	Actual to Date	% Construction
Construction		1,022,279.70	1,022,279.70	
CM Fees		96,530.95	96,530.95	9.44%
Construction + CM Fee Total		1,118,810.65	1,118,810.65	
Design	41,538.00	17,200.00	58,738.00	5.75%
Testing		6,967.00	6,967.00	0.68%
Hazard Materials Testing			-	0.00%
IOR		20,685.00	20,685.00	2.02%

Inspection Services

Inspection services for public works projects are normally conducted by a qualified Inspector of Record (IOR) approved by the Division of the State Architect (DSA). The construction inspector ensures that all inspections and tests are performed and certifies that the project is completed in compliance with the contract documents. The construction inspector should have appropriate credentials: ICBO, OSHPD, DSA or equivalent certifications and be paid prevailing wage rates per Labor Code Section 1720. The normal range for inspection costs as a percentage of construction costs is between 1.0 - 2.0% of construction costs.

Based on our review of the contracts utilized by the District, the inspection firms hired, James D. Maletic CM Services & RW Inspection & Consulting, Inc., are charging the normal rates anticipated for this work and have the appropriate credentials. The District contract with these firms also anticipates that overtime will be paid and has indicated a rate for such work. As the above table indicates the inspection costs for each project is well within the limits of normal costs.

Materials Testing

In general, we normally find that materials testing services will range from 0.75% - 1.5% of construction costs unless there are unusual circumstances which merit additional testing or special inspection. Often we find that materials testing firms underestimate the amount of time and number of tests that may be necessary to complete their work. As material testing is controlled by the IOR, it is usually difficult to ascertain whether excessive testing is called for during the course of the work. Where we find the greatest

GUHSD Prop H Program Review July 2007

problem is when the Owner is excessively burdened by costs for half-day minimum charges, payments for overtime and repetitive testing.

Based on our inspection of the contracts for testing utilized by the District the materials testing firms, Testing Engineers- San Diego and Construction Testing & Engineering, Inc. the rates charged are in line with the normal costs anticipated for this work. While there is a slight increase in testing costs for the Santana Infrastructure project we found that the total value of the materials and testing contracts fall within the limits expected for the work.

Value Engineering

As part of our review we were asked to address the existence of a systematic process for constructability review and value engineering to maximize the quality of the final product for the minimum cost possible and to investigate whether there was evidence of both on the projects.

Typically value engineering reviews are conducted at schematic, preliminary and working drawing/pre-bid phases of a project. Value engineering should identify a list of items which meet the District program standards, exceed those standards or are beyond requested program needs at each phase. Those items which exceed the program requirement thus become candidates for deletion at subsequent phase of project development. Directions are then given to the Architect to incorporate those items into the project documents.

Value engineering is an interactive process wherein any and all items are subject to consideration for revision or elimination at subsequent phases. All consultants including the Architects and CM are involved in an attempt to keep the project on budget.

Finding:

While we only reviewed two projects to ascertain the extent to which value engineering sessions were done we could only find one such review. This was essential a plan correction sheet prepared by the Construction Management firm at the preliminary phase for the Santana HS Infrastructure project.

Lacking certainty that there were budgetary difficulties with each of these projects it could have been unclear whether value engineering was necessary. However given the clear evidence that extraordinary cost escalation was being experienced during the

GUHSD Prop H Program Review July 2007

design period we would have expected to see more diligence in maintaining the budget through value engineering sessions.

Recommendation 4.3

We recommend as the program progresses that the District, through a Program Manager or in-house staff, take a more pro-active approach to budget control through value engineering sessions at schematic, preliminary and working drawing phases of project development and that they document decisions made at each phase of the work.

Change Orders

As part of our review we examined change orders for the above two projects. Normally projects have change orders associated with them as a result of unforeseen site conditions, unavailable materials, scope changes authorized by the Owner, errors and omissions in the documents prepared by the Architect or changes as a result of on-site field review by governing agencies (code interpretations).

For the Santana project, we found that total change orders added 7.56%, or \$244,865 to the base contract of \$3,240,000. However a \$145,000 credit change order represented the return of unused allowances. Excluding this from the change orders, the change orders added 12.03% to the original contract.

For the El Cajon/Granite Hills project, we found that change orders added 7.81%, or \$58,002 to the base contract of \$742,326.

Normal change order rates are between 3 -10% of project construction costs. An average new project maintains a maximum rate of approximately 5%, a renovation project 8%.

Following are recaps of total changes orders issued for both projects:

**GUHSD Prop H Program Review
July 2007**

Ranbar - Santana Wet Utilities

CO	CO Total	Description
1	140,000	Demo of all concrete and asphalt to remove gas line
2	49,500	Tree removal in SE quad area
3	58,010	Unstable soil conditions
4	21,760	Reconnect existing utilities not shown on drawings
5	52,618	Misc. offsets and reroutes
6	134,664	Concrete demo/replacement
7	(60,660)	Credit for sod, irrigation, and base
8	(145,000)	Credit for unused allowances
9	(6,027)	Credit for sewer line between 900 and 1000
	244,865	Total Changes
	<u>3,240,000</u>	Original Contract
	3,484,865	
7.56% Project Change % of Base Contract		
12.03% Project Change % of Base Contract (excluding allowance credit)		

3-D Enterpries, Inc. - El Cajon & Granite Hills

CO	CO Total	Description
1	19,532	Modification to hardscape
2	1,114	Valve work
3	1,102	Backflow cage per RFI #7
4	1,425	French drain to storm drain per RFI #10
5	2,907	Remove and replace existing benches
6	1,203	Remove and replace flagpole per RFI #17
7	3,035	Remove DG and replace with fill soil
8	14,717	Additional 17,000 SF of sod per RFI #22
9	405	New 12 station irrigation controller
10	6,010	Remove and relocate marquee per ASI #2
11	5,606	CHHS POC and new main force account
12	<u>946</u>	New 8-station controller at ECVHS
	58,002	Total Changes
	<u>742,326</u>	Original Contract
	800,328	
7.81% Project Change % of Base Contract		

Typically change orders are tracked by reason categories and a log is kept such that at the completion of the project, errors and omissions are known as well as additional scope work added to the project. Errors and omissions are significant if they exceed 2-3% of the project construction costs and are a cause for action with the architect.

GUHSD Prop H Program Review July 2007

Finding:

The Santana Wet Utilities had 12.03% in change orders; the Site & Landscape Restoration at El Cajon Valley & Granite Hills HS had 7.81% in change orders. The Santana project reflected a slightly elevated percentage for change orders. There were a number of change orders attributable to unforeseen conditions which is often the case with infrastructure projects. The El Cajon/Granite Hills project was within the standard of care anticipated for this project and seemed to be well managed.

We found no contract log designating the type of change for either project. Since we found no log we could not comment on the extent of errors and omissions attributable to the architect.

Recommendation 4.4

We recommend that the District consider maintaining a record of change orders on each project and assigning them a category by reason so that the District develops a database of change order causes. These typically are tracked by:

- 1 E/O - Omissions from the contract documents
- 2 E/O - Errors on the contract documents
- 3 Unforeseeable job site condition
- 4 Change in the requirements of a regulatory agency
- 5 Change originated by District
- 6 Changes in specified work due to the unavailability of specified materials
- 7 Backcharges

GUHSD Prop H Program Review July 2007

SECTION 5: LABOR COMPLIANCE PROGRAM

As part of this review we were asked to address the existence of a vigorous Labor Compliance Program and to specifically address the following elements:

- *Assess the expertise of the labor compliance firm hired to execute the program*
- *Address the adequacy of records kept for the over all program*
- *Inspect evidence that enforcement is being conducted by the use of on-site interviews, audits and follow-up with contractors and subcontractors*
- *And finally, track the records to date on two specific projects*

As part of our research, we prepared a set of questions (See Attachment A) and requested documents from Keenan & Associates (Keenan), the Labor Compliance Program firm hired by the District on May 22, 2006, to monitor the Prop H Bond Program. Prior to the date of this contract, labor compliance services were conducted by HMC Architects under a Master Architect Agreement.

We did not review Labor Compliance activities prior to 2006, but note that the Master Architect conducted labor compliance activities up until the time this contract was initiated. Similar fees were paid in compliance with the State Allocation Board fee schedule.

The documents we reviewed from Keenan included the following:

- *Resumes of key staff assigned to the GUHSD labor compliance program*
- *Contract between Keenan & Associates and the District, executed June 6, 2006*
- *Evidence that Keenan & Associates maintains annual certification from the Department of Industrial Relations to operate a Labor Compliance Program*
- *Copy of the 2006 annual report submitted by Keenan & Associates to the DIR covering the period of April 2005 through April 2006 summarizing their work for over 30 Community Colleges and School Districts and cost recovery of \$77,086.77 in back wage and underpayments*
- *Copy of the 2007 annual report submitted by Keenan & Associates to the DIR covering the period of April 2006 to April 2007 summarizing their work for over 22 awarding bodies and the District*
- *Copy of Keenan & Associates Preconstruction Manual and guidelines utilized for the GUHSD Vallhalla Track/ Field Project, dated March 15, 2007*
- *Copy of guidelines and procedures utilized during filed interviews by Keenan & Associates personnel*
- *Copies of the labor compliance records for two (2) projects:*

GUHSD Prop H Program Review July 2007

1. Grossmont HS General Building, Fordyce Construction (prime contractor) from June 23, 2006, to October 21, 2006, and

2. Helix HS Phase 2A, The Augustine Co. (prime contractor) from June 16, 2006, to September 1, 2006.

Expertise of Labor Compliance Staff

Keenan & Associates was retained by the Grossmont Union High School District to implement and enforce their Department of Industrial Relations (DIR) third party labor compliance program as required by Assembly Bill (AB) 1506.

AB 1506 requires any awarding body that chooses to use funds derived from either the Kindergarten-University Public Education Facilities Bond Act of 2002 or the Bond Act of 2004 for a public works project utilizing those funds to initiate and enforce, or contract with a third party, to initiate and enforce, a labor compliance program as described in subdivision (b) of Section 1771.5, with respect to any public works project. This section applies to any public works project that commences on or after April 1, 2003. For the purposes of this subdivision, work performed during the design and preconstruction phases of construction, including, but not limited to, inspection and land surveying work, does not constitute the commencement of a public work.

Since the majority of public works projects being conducted by the District are partially funded with both Proposition H funds and either 2002 or 2004 Bond Act funds, they are subjected to a Labor Compliance Program in their entirety. No parsing of project funds is allowed.

Under their labor compliance program, Keenan provided the following services:

- *Assisted the District in meeting the needs of the labor compliance program in an on-going capacity*
- *On-site interviews for payroll/trade verification*
- *Attended pre-construction meetings with General Contractors and Subcontractors*
- *Conducted comparisons of contractor/subcontractor certified payroll records and forms submitted to DIR or US Department of Labor standards*
- *Verified payroll amounts paid to wage determinations provided by DIR or US Department of Labor standards*
- *Reviewed apprenticeship documentation, payments and requirements*

GUHSD Prop H Program Review July 2007

- *Reported any discrepancies to the General Contractor and, if necessary, filed complaints with the DIR including the furnishing of follow-up documentation through to resolution*

Keenan & Associates established an experienced team to partner with the District. Keenan is based in Torrance, California and is led by four staff committed to Grossmont UHSD; a Labor Compliance Manager, two Labor Compliance Administrators, and one Field Compliance Officer. Additional team members were available to complement the District staff as needed.

Finding:

Based on the resumes of the staff, qualifications, and experience as evidenced in the Keenan files, they appear to be well qualified to manage the program for the District. They have active involvement with several educational Districts, the DIR, and other clients and provide a wide range of compliance monitoring services.

Keenan's program is adequately staffed by contract with the GUHSD.

Cost of Labor Compliance Program

We reviewed the contract between Keenan & Associates and the District, dated June 6, 2006. The scope of work as defined by the contract appears to be adequate to cover the services necessary to manage the labor compliance program for Prop H. Typically, compliance programs cost between 0.4% and 1.0% of construction costs. The fees for this work are governed by the State Allocation Board (SAB) and must be consistent with AB 1506 Cost Guidelines.

The following table shows the approved range of fees:

For the first \$1 million or any part thereof, plus	\$16,000	< 1 million	16,000
For the next \$1 million or any part thereof, plus	1.60%	2 million	16,000
For the next \$1 million or any part thereof, plus	0.25%	3 million	2,500
For the next \$1 million or any part thereof, plus	0.15%	4 million	1,500
For the next \$2 million or any part thereof, plus	0.32%	6 million	6,400
For the next \$2 million or any part thereof, plus	0.31%	8 million	6,200
For the next \$5 million or any part thereof, plus	0.46%	13 million	23,000
For the next \$5 million or any part thereof, plus	0.44%	18 million	22,000
For the next \$30 million or any part thereof, plus	0.42%	48 million	126,000
For any remaining portion	0.40%	>48 million	208,000
			427,600

GUHSD Prop H Program Review July 2007

The contract with Keenan & Associates is based on the above State Allocation Board Reimbursement Table and was calculated using a Total Construction Value of \$100,000,000 as requested by a Request for Proposal (RFP) issued by the District. The calculated fee, based on the table, was therefore \$427,600. However, according to the contract and response to the proposal, Keenan & Associates reduced their fee by 40% to \$256,600 because of their familiarity with the program and school district compliance in general.

Finding:

Based on our review of District records, the fee has been billed and paid quarterly in the amount of \$32,075/quarter. A total of \$128,300 was invoiced during the period from April 2006 to April 2007. There is nothing in the contract between Keenan and the District that suggests this contract was to cover a period of two years or is in any way tied to the construction value of \$100,000,000. We found no evidence to substantiate whether this fee was consistent with the SAB reimbursement table based on the amount of actual construction work put in place during the period. We also found no evidence indicating how their fee was tied to the overall program costs or the individual project costs for accounting purposes.

Recommendation 5.1

We recommend that the District verify that Keenan did not exceed the fee on a per project basis as established by the SAB Reimbursement table. This could be accomplished by requesting actual time expended on each project. Although Keenan stated in an email interview that they kept records based on actual time expended, it is used by Keenan only as a time management tracking tool and is not reported to the District on a per project basis. It is unclear whether fees exceed or are less than the approved scale.

Recommendation 5.2

We further recommend that the District, once they have collected the labor compliance costs, allocate labor compliance program costs to each of the projects for accounting purposes.

GUHSD Prop H Program Review July 2007

Adequacy of Records Kept for the Program

During our review we inspected annual reports as submitted by Keenan as required by DIR for the District. GUHSD is one of several clients serviced by Keenan and the annual report covers multiple Districts and jurisdictions. In accordance with Assembly Bill 1506, an annual report must be submitted within 60 days after the close of the fiscal year. A report was submitted on May 1, 2007, for the 2006/2007 FY consistent with the requirements of the DIR Guidelines for Third Party Administrators (8 CCR & 16431 – 3rd Party).

Finding:

According to the final report, violations for wage underpayments, if found, were deemed not premeditated and corrected immediately. No other violations or forfeitures were found and all programs were in compliance. There were no individual reports submitted for the GUHSD as they were aggregated with other programs. Although they are not necessary, if the District requested individual reports, Keenan can provide them.

Evidence of On-Site Audits and Follow-up with Contractor

During the period from April 1, 2006, to March 31, 2007, Keenan conducted 234 on-site interviews at GUHSD sites. Interviews were conducted with bi-lingual interviewers from Keenan staff.

Keenan & Associates maintains a site visit methodology for interview procedures. During interviews, a minimum of two employees were asked to answer questions relative to work performed, job title, dates of hire, trade, and skill level. Interviews were used to verify and reconcile certified payroll data collected and daily reports.

Finding:

The Labor Compliance program follows approved directives of DIR and AB 1506 and is more than adequate to meet the needs of the District.

Preconstruction Conferences/Outreach

The Labor Compliance firm maintains a preconstruction manual which contains instructions for contractors and subcontractors regarding labor compliance. This manual contains a checklist for review at preconstruction conferences with all contractors and subcontractors, guidelines for finding correct prevailing wage rates, and payroll reporting

GUHSD Prop H Program Review July 2007

instructions. We reviewed the manual utilized for the GUHSD Vallhalla Track/Field project and found it to be a valuable resource.

Keenan's approach is to educate each subcontractor as to the requirements of labor compliance. This includes providing all LCP documents and forms relating to the project to contractors to insure timely completion and compliance. Outreach seminars were also conducted for contractors unfamiliar with public works projects. Keenan took the approach of a resource and consultant rather than a "policeman".

Finding:

An active program is in place which promotes compliance and assists contractors and subcontractors in filing the appropriate forms and maintaining prevailing wage rates. The program encourages participation by contractors rather than penalizing them. With such a program, contractors can actively be solicited to participate in the overall Bond program to the benefit of the District.

Specific Project Tracking

We reviewed the records of two projects showing evidence that detailed the labor compliance monitoring process conducted during several months of project construction.

Based on Keenan's records, their audits revealed no willful history of wage underpayment violations. When notified of an error or underpayment discrepancy, all contractors issued back wage payments and corrected the errors.

The Labor Compliance firm also managed any DIR related matters until there was amicable resolution including hearings. During the reporting period and as evidenced by the two projects examined, there were no formal forfeitures or formal requests to withhold progress payments to contractors. Further, no hearing or court proceedings were held during the period.

Finding:

The specific projects examined showed evidence of a complete and comprehensive labor compliance procedure and program.

Recommendation

None

GUHSD Prop H Program Review July 2007

SECTION 6: CONSTRUCTION COST ESCALATION

As part of this review we were asked to assess the Program's ability to deal with the dramatic construction cost escalation experienced from the time the Grossmont Union HS District's Proposition H was approved by the voters in March 2004 until the present. We were also asked to assess the degree to which contractors are actively solicited and whether the District has been successful in achieving bidder participation.

As part of our research we reviewed specific program and project documents in an effort to track the internal methodology for dealing with cost escalation during various phases of program development, either through budget adjustments or value engineering exercises within the program. We also looked for reports, workshops or messages that might have informed the community, either through the CBOC or the District about cost escalation increases, and evidence of how information was communicated on the subject. We further attempted to find evidence that contractors were actively solicited during the bid process and that there were sufficient bidders involved in each project.

Cost Escalation:

Numerous newspaper articles and technical publications have been written concerning construction cost increases experienced during the past several years in the building construction market. Most publications attempted to justify the cost increases and place blame on the overseas markets, lack of materials, oil prices, weather or other phenomena. Price increases were generally reported in the neighborhood of 15-22% during the period from January 2004 to January 2006 with a significant spike during the later part of 2004. As these are nationwide statistics, price increases need to be adjusted for the local San Diego and California region, and for the educational market in which the bond program resides. In California, and particularly in the San Diego region, we found evidence in some cases where the cost increases were 3-5% higher than the national average.

The standard method of forecasting educational projects within the State of California is to use the California Construction Cost Index (CCCI). This index is updated monthly by the Department of General Services and is used by the CA Department of Finance and other agencies to forecast and budget project costs throughout the state. The following table illustrates the cost escalation ranges according to the CCCI for the past ten years:

GUHSD Prop H Program Review July 2007

California Construction Cost Index (CCCI)

Month	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
January	4869	4620	4339	3978	3939	3859	3862	3746	3772	3685	3473
February	4868	4603	4362	4039	3939	3856	3867	3758	3764	3691	3482
March	4871	4597	4360	4034	4021	3863	3867	3846	3751	3695	3488
April	4872	4600	4393	4125	4002	3843	3906	3846	3752	3700	3572
May	4886	4599	4403	4125	4007	3942	3908	3846	3748	3714	3595
June	4842	4593	4421	4192	3988	3943	3885	3857	3744	3715	3598
July	4849	4609	4411	4194	3989	3944	3868	3855	3745	3718	3643
August		4616	4399	4205	3988	3939	3869	3853	3739	3717	3656
September		4619	4533	4309	3993	3939	3862	3858	3742	3732	3656
October		4867	4554	4310	3994	3940	3861	3861	3748	3786	3676
November		4891	4587	4325	3988	3941	3863	3861	3745	3780	3674
December		4877	4614	4339	3980	3941	3860	3862	3745	3772	3685
Annual %		5.60%	6.30%	9.10%	1.00%	2.10%	-0.10%	3.10%	-0.70%	2.40%	6.10%

The California Construction Cost index is developed based upon Building Cost Index (BCI) cost indices for San Francisco and Los Angeles produced by Engineering News Record (ENR) and reported in the second issue each month for the previous month. This table is updated at the end of each month.

The ENR BCI reports cost trends for specific construction trade labor and materials in the California marketplace.

This page last updated: 7/17/2007

According to the CCCI, the cost increase since the passage of Proposition H in March 2004 to June 2007 has escalated 21.2%, however as the table shows, the rapid escalation experience during the later part of 2004 and early 2005 has slowed somewhat and has stabilized.

Based on information received from the Department of Finance the increases projected for planning purposes for Fiscal Year 2008/09 are at CCCI 5135 or a 5.1% increase over current costs. For Fiscal Year 2009/10 they recently released a CCCI of 5179 projecting only a 6.0 % increase over the next two years. If these forecasts are accurate these planning indexes reflect an optimistic "flattening" of the economy and construction costs over the next few years.

Important to note is that the since the passage of Prop H cost escalation will likely continue and is forecast to be 28.3% higher by 2009 than in March 2004. This will continue to erode the buying power of the original bond measure. In simple terms the original Prop H bond measure of \$274.0 M is now worth approximately \$215.9 M and will continue to have less buying power in the future as the program matures.

Finding

We do not believe that the District could have predicted the dramatic cost escalation when the original bond measure was sized in 2003. We observed that the original Long Range Facilities Master Plan (LRFMP) contained a 4.5% escalation, however due to the

GUHSD Prop H Program Review July 2007

renovation nature of the bulk of the program, we feel a 10% escalation factor would have yielded more predictable results. Hence, the program was likely under budget before the bond issue was voted on in March 2004.

As discussed above we believe the District not only experienced the 21.2% increase but because we are in the San Diego market area (as opposed to the State of California, in general) and projects are small in scope and within the Public Works environment (with prevailing wage and other requirements) that the price increases were more in the neighborhood of 10% higher or approximately 32.0%. This coupled with an under-budgeting suggests that the program has experienced cost increases approaching 40%.

At the Board of Education workshop held on February 3, 2007 District management reported that the cost escalation coupled with budget cost growth was in the range of 29-42%. We generally concur with their estimate.

Based on our experience we have developed several methodologies for dealing with construction cost escalation that are worthy of note:

- *Build escalation into initial budgets with the best know information at the time. Pay particular attention to renovation projects and ones that are small and will be bid separately. Forecast higher contingencies.*
- *Annually update budgets and forecast costs*
- *Plan on unforeseen contingencies especially with renovation projects*
- *Conduct value engineering sessions at each phase of plan development*
- *Re-scope projects as necessary to fairly distribute the funds*
- *Accelerate schedules where possible to save project "creep" caused by inflation*
- *And finally, inform stakeholders of changes to the program scope, schedule and budget*

We found that there appeared to be a lack of District control of the budgets for the various projects and a lack of value engineering on the projects we inspected. Current District administration is addressing the budgets and revising their approach to cost escalation and project controls. Based on discussions with them, we concur with their approach to resolving overall program issues with regard to cost escalation.

GUHSD Prop H Program Review July 2007

Recommendation 6.1

We concur with the current District administration's approach to dealing with the overall program deficits as a result of cost escalation. They have shared information with the various stakeholders and the Board, and are in the process of seeking new direction.

Contractor Participation:

In order to investigate whether the District had developed good contractor participation in the bidding of their projects we looked at the recently bid modernization projects, Modernization Phase 2B at Grossmont and El Cajon HS.

Both project bid sheets indicate excellent participation from the construction community. Each trade bid had a minimum of three qualified bidders. We found that contractor participation was adequate for the program.

Recommendation

None