

June 2005



REGISTER

Volume XXVI, No. 6

THE NEWSLETTER OF THE COALITION FOR ADEQUATE SCHOOL HOUSING

In This Issue...

- 2 ▶ Dave Doomey
Recognized for
C.A.S.H. Service
- 2 ▶ Legislative Update
- 4 ▶ Thank You
Workshop Presenters
- 4 ▶ Facility Design:
Pest Prevention
- 5 ▶ Is Your School Built on
a Stable Foundation?
- 6 ▶ Ultrasonic Testing
- 7 ▶ Morgan Creek
Elementary School –
Dry Creek Joint Unified
School District
- 20 ▶ Upcoming Meetings,
Conferences &
Workshops

Morgan Creek Elementary School

See page 7 for details



Legislative Update

AB 315 (Hancock) – CHPS Standards

Approved by the Senate Education Committee on a 7-0 party line vote.

AB 315 requires that in subsequent statewide school bonds, the SAB must develop, and districts must follow design standards based on CHPS guidelines concerning energy efficiency, indoor air quality, etc. C.A.S.H. initially opposed the bill until the author addressed C.A.S.H.'s concerns about the lack of funding by including a funding mechanism similar to the SB 575 funding mechanism, and the difficulty of reaching specified energy saving thresholds when executing modernization projects by limiting the bill only to New Construction projects. In response to these amendments, C.A.S.H. has changed its position to support.

SB 327 (Lowenthal) – Piggyback Contracts

Approved by the Assembly Education Committee on a 9-1 vote.

SB 327 prohibits school districts from authorizing public projects and public works contracts without advertising for bids and includes in the definition of personal property, which is authorized to be purchased without advertising for bids, relocatable classrooms. Defines relocatable classroom as any building with an integral floor structure which is capable of being readily moved and transported over public streets without the separation of the roof and floor from the building, and includes the delivery, installation, maintenance, repair, and removal thereof.

C.A.S.H. was the only organization to oppose SB 327. Specifically, C.A.S.H. opposed SB 327 because the bill limits the ability of districts to



At the June 22 Membership Meeting, C.A.S.H. Chair Pamela T. Johnson, Montebello Unified School District and Immediate Past Chair, Eric J. Hall, San Dieguito Union High School District, presented Dave Doomey, Past Chair, Capistrano Unified School District with an award for his many years of dedication and service as the C.A.S.H. representative to the State Allocation Board's Implementation Committee. Dave served from 1998 to 2005. Eric J. Hall has been appointed as the new C.A.S.H. representative to the Committee.

(from l to r) Pamela T. Johnson, Dave Doomey, Eric J. Hall



REGISTER

Volume XXVI, Number 6
June 2005

© 2005 The Coalition for Adequate School Housing

ISSN: 1081-9088

Publisher: Coalition for Adequate School Housing • Editor: Greg Golik

The CASH Register is published eleven times a year (January through November) by the Coalition for Adequate School Housing (C.A.S.H.) and distributed to C.A.S.H. members. Over 1,000 rapidly growing school districts, county offices of education, architects, attorneys, bond counsel, financial institutions, developers, contractors, consultants, inspectors, licensed professionals, manufacturers of portable classrooms, maintenance suppliers and others who are concerned about school construction issues hold C.A.S.H. memberships.

The CASH Register solicits articles on school facility-related topics from the membership. If you are interested in submitting an article, please send it or a letter of inquiry to: Editor, CASH Register editorial office, 1130 K Street - Suite 210, Sacramento, CA 95814. Sorry, we are unable to return or acknowledge unpublished manuscripts. The views expressed herein are those of the authors and not necessarily those of the Coalition for Adequate School Housing, its board, staff or general membership.

provide cost and time-efficient solutions to their facilities needs.

AB 491 (Goldberg) – Enrollment Projection Methodology

Approved by the Senate Education Committee on an 8-1 vote. The bill was amended in Committee; however, C.A.S.H. has not received the final amendments. C.A.S.H. was consulted on the amendments, but because of the intense negotiations between Senator Scott and the author, a final version of the language was not available at the time the bill was voted on.

AB 539 (Daucher) – Cost Index Unanimously approved by the Senate Education Committee

This bill authorizes inflation adjustments to school facility construction and modernization apportionments at the time of bid opening or nine months after the apportionment, whichever comes first.

C.A.S.H. testified in support of AB 539.

AB 952 (Coto) – Sale of Surplus Property

Approved by the Senate Education Committee on a 7-0 party line vote.

This bill would allow specified districts to deposit the proceeds from the sale or lease of surplus property to be deposited into the district's general fund.

Chairman of the Senate Education Committee Jack Scott stated that he was concerned about the proliferation of legislation in the past few years that has allows the proceeds from the sale or lease of surplus property to be deposited into the district's general fund on a district-specific basis. Chairman Scott also expressed concern that a district affected by the bill had already sold the land and pursued this bill only after they were informed by OPSC that under existing law the proceeds derived from the sale of surplus property must be used for capital purposes. The author responded that the Legislature and Governor has provided individual

exemptions for some suburban districts, and that AB 952 would provide the same exemptions for urban districts. Senator Scott responded that he would like more specifics concerning for what purpose these funds would be used.

The Committee closed down for scheduling reasons, and resumed the next morning to continue its deliberations on AB 952. During the break, the author provided the Committee a list of items that the funding would be spent on, a list which contained many items that were "capital" in nature such as deferred maintenance, and some that were more "operational in nature". The bill was also amended to prohibit these funds from being used for teacher salaries and benefits.

C.A.S.H. opposed the bill on the grounds that, while we recognize that, that many districts are seeking flexibility in these lean budget times, it is a cornerstone of C.A.S.H.'s philosophy to ensure that funding intended for capital purposes is not used for operations. Specifically, C.A.S.H. testified that while we continue to be concerned about the erosion of the distinction between capital and operational funds, we are pleased that the Committee required that the funds be utilized for capital purposes to a greater extent.

AB 1297 (Evans) – Indoor Air Quality

Approved by the Senate Education Committee on an 8-0 party line vote.

AB 1297 would a) allow districts to use Deferred Maintenance Program (DMP) funds to improve indoor air quality (note: current law already allows districts to use DMP funds for this purpose), b) requires districts to develop indoor air quality standards according to 142.3 of the Labor Code relating to Cal-OSHA standards, c) require districts to contract for consultants who are certified by a nationally recognized organization to maintain their HVAC systems.

Senator Scott stated that he supported the goal of improving indoor air quality in schools, but was concerned

that this bill could reduce flexibility at the local level. C.A.S.H. and the Association of California School Administrators (ACSA) opposed the bill. Specifically, C.A.S.H. stated that we believe indoor air quality is an important issue, but objected to the following provisions of the bill:


A) Requirement that schools develop indoor air quality standards based on 142.3 of the Labor Code (Cal-OSHA standards). C.A.S.H. argued that it would be much more effective to require the State Allocation Board (SAB) to develop the standards because they administer the School Facility Program (SFP).

B) Requirement for districts to utilize contractors who are certified by a nationally recognized organization to maintain the HVAC systems. C.A.S.H. recommended an amendment that would allow qualified district staff to maintain the HVAC systems, but the Committee did not accept these amendments. Instead, amendments were negotiated that require initial installation and inspection of HVAC system activities to be conducted by a contractor certified by a nationally recognized organization, but general maintenance activities will continue to be conducted by district maintenance staff.

AB 1451 (Montañez) – MTYRE/Eligibility Calculations

Remained on Suspense File.

This bill would increase the eligibility for state school construction funding for most school districts by eliminating current reductions to eligibility calculations required if a district: 1) receives multi-track year round education (MTYRE) grants, or 2) does not have sufficient MTYRE schools.

C.A.S.H. supported the bill because it would have eliminated the 6% "hit" for districts that do not operate schools serving at least 30% of K-6 ADA on MTYRE schedules, and would allow districts to build off of MTYRE schedules. 

Thank You

Workshop Presenters



Presenters at the June workshop - So What Is Happening with Piggyback Contracts – in Sacramento were Tom Duffy, Murdoch Walrath & Holmes, Denise Wakefield, Tracy Joint Unified School District, Dennis Dunston, HMC Architects, Patrick Gunn, Atkinson Andelson Loya Ruud & Romo, Sima Salek, Orbach Huff & Suarez, LLP, and Bill Meehleis, Meehleis Modular Buildings, Inc. Not pictured are Matt Hicks, Bergman & Dacey, Inc. and Ron Kuehl, Neff Construction, Inc.



Presenters at the June workshop - So What Is Happening with Piggyback Contracts – in Ontario were Gregory Bergman, Bergman & Dacey, Inc., Ted Rozzi, Corona Norco Unified School District, Rosalie Aja, Corona Norco Unified School District, Steve Crivelli, Meehleis Modular Buildings, Inc., Patrick Gunn, Atkinson Andelson Loya Ruud & Romo, Tom Duffy, Murdoch Walrath & Holmes and David Huff, Orbach Huff & Suarez, LLP. Not pictured are Don Lussier, Corona Norco Unified School District and Ron Kuehl, Neff Construction, Inc.

Facility Design

Pest Prevention

By Sewell Simmons

Effective pest management for schools is a challenge. Too often, the design of school facilities unintentionally provides ideal entry points and harborage for pest insects, rodents, and other unwelcome wildlife. However, you can create conditions that discourage pest infestations and make it easier to manage pests. Consider pest management needs during facility design and incorporate features that exclude pests, minimize pest habitat, promote proper sanitation, and facilitate inspection.

“Prevention is the key to effective, least-hazardous pest management programs in schools,” advises Mary-Ann Warmerdam, Director of the Department of Pesticide Regulation. “Pest prevention needs to be a part of the early planning stage of school design. A good design will keep out pests, eliminate pest shelter and make easy cleaning possible. It also reduces the need for future corrective measures and pest management services that can be expensive, as well as disruptive to school operations and activities,” she said.

“In the long term, pest prevention through facility design will reduce overall costs for schools,” said Director Warmerdam.

Several basic structural features cause most problems with pest prevention efforts. Many buildings have doorways and windows that do not fit tightly. Openings associated with heating, ventilation and air conditioning,

Continued on page 8

Is Your School Built on a Stable Foundation?

By Jack R. McMillan



When the Seismic Hazards Mapping Act was passed in 1991, the California Geological Survey (CGS) began mapping areas prone to landslides, liquefaction, and strong ground shaking. Once hazard zones are established for an area, a thorough geological investigation is required for residential and commercial construction in order to get a building permit from the local jurisdiction. For hospitals, schools and state-owned buildings, permit approval is required from the Division of the State Architect (DSA). This article summarizes the current geologic review required prior to permit approval for schools.

There are two processes that all public schools must go through to ensure their foundations are built on stable ground. During the site selection process, a *preliminary* Geologic Hazard Report is required in order to help determine which campus site among the alternative sites is the best to purchase. Once the site has been purchased and the school project is at the planning stage, a more detailed *final* Geologic Hazard Report is required to ensure that the foundation conditions found at the site have been adequately considered prior to designing the buildings.

In the past, the California Geological Survey has been providing geologic reviews as requested by DSA and usually only for difficult site conditions found on school projects. Currently, CGS is reviewing about 400 school projects annually. Many of those reviews request additional information on ground shaking levels, building settlement calculations and deep soils information. Some of the review questions have resulted in additional site investigations by the consultant to ensure complete understanding of the geologic conditions.

Preliminary Geologic Hazard Reports

Geologic Hazard Reports are a critical part of the evaluation process for a proposed new school site. Hospitals and schools are held to higher standards of construction than regular buildings. In a sense, the geologic review helps enforce existing laws under CEQA and the Department of Education. It is the responsibility of the reviewer to ensure that each geological investigation and the resulting report adequately addresses the regional geologic constraints at a given site. This evaluation is often made with only minimal subsurface information.

Final Geologic Hazard Reports

The requirements for final Geologic Hazard Reports submitted for school projects are contained in DSA's Interpretation of Regulations, IR A-4. Basically, all new school campuses, major buildings and structures on existing campuses, all schools within hazards zones and any site where DSA requests geological review are evaluated by the California Geological Survey. In order to receive final project approval, the engineering geologic report must include at least:

- onsite drilling, exploration and soil testing to a depth of 50 feet;
- calculated ground shaking values from currently accepted maps, and;
- evaluation by a civil engineer and an engineering geologist.

In California, geotechnical firms must have licensed geotechnical engineers and certified engineering geologists (CEG) in order to prepare reports for schools. Both professionals are required in order to make the appropriate evaluations found in engineering geologic reports. Reviewers need to be experienced geologists familiar with the equipment, techniques and testing methods employed for site evaluation. The California Geological Survey requires that only CEG's review the geologic work in geotechnical reports to ensure quality analysis. Even so, the reviewer must know their limitations and ask for the opinions of others more qualified in specialty fields when necessary. The primary purpose of the geologic review process is to assure the adequacy of geologic investigation and that reports are in compliance with California Code of Regulations-Title 24 CBC. Reviewers are currently using an interpretation of the 2001 CBC based on Note #48 (www.consrv.ca.gov) for guidance.

Continued on page 9

Ultrasonic Testing

By Clay Salzman



Was it really inspected?

Ultrasonic testing is required for welded, fully restrained connections between the primary members of ordinary moment frames and special moment-resisting frames in accordance with the provisions of 2001 California Building Code section 1703A.1. Unfortunately, the required nondestructive test is not always performed, and only a document signed by the Level 2 Ultrasonic Testing Technician is provided to certify that the Ultrasonic Test was performed. I have observed and reported these occurrences on several assignments. The canned excuses are as follows: "I saw the work of the welders," "We will UT it out in the field," "I only need to test a percentage of the work," "The connection was inaccessible for UT inspection," or "The engineer over designed it anyway." I once listened to the manager of the structural steel department of a DSA

Approved Testing Laboratory boast about the drive-by Ultrasonic Tests that he performs, as he claimed in a meeting of managers, "He sticks the UT transducer outside the window of his truck as he drives by the job." The amount of school district money for UT inspection work that is not really performed must be a staggering figure. The inspection labs are usually charging a minimum of two to four hours at more than fifty dollars per hour and up to more than eighty dollars per hour in many cases because UT inspection is considered a higher level of inspection responsibility.

How can you tell if the Ultrasonic Tests were performed?

Review the report prepared by the Level 2 Ultrasonic Testing Technician. The locations of the tests are usually specified by reference to column lines and floor framing levels, and with

directional reference to the North Arrow orientation on the approved structural drawings. Go to that location on the site and look at the connection. If you look at the connection in a timely manner and before any rainy weather has occurred a residue from the ultrasonic test couplant material will be present. The couplant is defined as a substance used between the face of the transducer and test surface to permit or improve transmission of ultrasonic energy across this boundary or interface, primarily used to remove the air in the interface. UT technicians would not normally remove the couplant from the steel surface after the tests are complete. A recently completed UT examination should be evident by a residue from the couplant. Welding is a messy job. Residue from smoke and molten particles of metal will be left behind. These particles or bumps around the welded joint are referred to as "Spatter." In order for an Ultrasonic Transducer Block to perform effectively the area must be cleaned to allow free movement of the block across the surface of the steel. If the surface is covered with spatter, the ultrasonic test was not performed.

What should you do?

Make like a good inspector who has identified a serious nonconforming building connection and, without alerting anyone, proceed to every accessible connection that has been reported as having an ultrasonic test completed. Prepare a report of every location and present the report to the DSA field engineer for review and request an unscheduled visit to the structural steel fabrication shop if additional UT inspections were performed at a shop and prior to the delivery of the steel. The welded material from the shops can be identified in the field in the same manner mentioned above. If you go to the structural steel fabricator, don't be surprised to find that constant inspec-

Continued on page 9



Morgan Creek Elementary School – Dry Creek Joint Unified School District

Creating a Model for California School Districts

Dry Creek Joint Elementary School District in Roseville, California, has presented a program and a challenge to Stafford King Wiese ARCHITECTS of Sacramento, California – design a 750-student elementary school that includes a multipurpose, administration, and library/resource center buildings and 24 classrooms within LEED Gold standards (set forth by the U.S. Green Building Council), overcome site challenges and do it all within a budget


of \$14 million under the funding guidelines of the Office of Public School Construction. Stafford King Wiese ARCHITECTS accepted the challenge and completion of Morgan Creek Elementary School is anticipated in August 2006.

“Morgan Creek Elementary School will be a three-dimensional textbook and will support the educational objectives of the District,” says Dr. Kelvin Lee, Ed.D., Superintendent. The mission set forth by

the District is to meet the educational needs of the District by creating a new and exciting learning environment, become an active community partner with joint-use facilities and implement high sustainable design standards. The District would like to be a model for other districts in the State of California.

Site constraints are being addressed with a two-story classroom oriented to maximize natural elevations of the site as well as sun angles and wind direction. The design of the site will include paths and a dry creek bed. It has a small preserved grassland for drainage, two knolls sloping downward creating a ten-foot difference in elevation from one side of the site to the other. The shape of the site also provides a challenge with its unusual dimensions.

An artificial creek is being developed to collect surface and roof run-off water. The creek will be dry in the summer and act as a filtering median during the rainy season. The creek is designed prominently passing through the heart of the campus serving as a living laboratory. The creek path design concept is further developed and implemented by careful placement and orientation of buildings resolving program connectivity requirements, way-finding and a reminder of the ever-present site and the natural environment.

The District in conjunction with the Morgan Creek Golf and Country Club, the Placer County Parks Department, and the Roseville community has made this project a reality. Once complete, this elementary school will be the most sustainable building in the Dry Creek Joint Elementary School District. To further the partnership with the Roseville community, the campus serves as a link between the guarded golfing community and the public community opposite the school site. The school will be home to a five-acre park with joint-use programs between the District and the Placer County Parks Department. 



Facility Design: Pest Prevention

Continued from page 4

plumbing, electrical service, and fire sprinklers are other common pest entry points. Even in new buildings, electrical conduit, water and gas lines, and communication cables generally have openings large enough to permit pest entry into the building. Wall cavities, ceiling cavities, and the space beneath floors can all provide expansive areas of pest harbor-age inside the building. From these areas, pests can easily enter the rest of a building via the utilities, overhead sus-pended ceilings, and air condition-ing ducts that all provide a very effective pest distribution system.

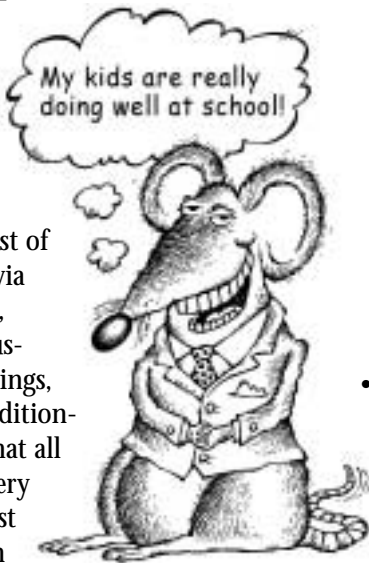
While building codes effectively establish the first line of defense for pest prevention, an effective pest prevention program must go beyond the building code requirements, particularly in aging structures where years of use, break-down of materials, additions or modifi-cations, and changes in use have created conditions favorable to pest access and harbor-age.

Following are some techniques that managers, staff, and contractors can practice to reduce long-term operating costs.

FACILITY DESIGN

OUTDOOR AREAS BUILDING EXTERIORS AND PERIMETERS:

- Maintain a plant-free zone of about 12 inches around buildings to discourage insects from entering.



- Specify windows with no clear passageways to the inside to prevent access and harbor-age for pests. Use screen or mesh to modify weep holes in window frames to prevent access by paper wasps.
- Correct structural features that provide opportunities for bird roosting or nesting.
 - Avoid locating decorative lattices over entrances to food services facilities; they inadvertently may serve as bird roosts.
 - Install bird-proof barriers designed to prevent both pigeon and sparrow access to preferred nesting sites.
 - Specify light fixture designs that do not provide opportunities for bird perching, roosting or nesting.
 - Fit eave roof tiles with bird stops (that will also exclude bats, bees and wasps).
- Correct structural features that provide opportunities for rodent harbor-age or burrowing.
 - Screen or otherwise eliminate animal access under decks, porches, and stairways. Seal porches and ramps to the building foundation with 1/4-inch hardware cloth screen mesh to form a barrier to digging pests such as rats and skunks. This screen must extend 12 inches into the ground and must have a right-angled, 6-inch wide, outward-extending shelf to prevent burrowing under the screen.
 - Screen ventilation louvers with 1/4-inch hardware cloth screen mesh to exclude cats, birds, rodents, and other wildlife (coordinate with mechanical requirements).
 - Maintain a 2-foot wide pea gravel strip (where not readily accessible to students) around buildings to prevent rodent burrowing.
- Use a 3-inch layer of sand for the sand barrier underneath slab construction. Use 1–3 millimeter particle

size in place of unsifted sand to provide a permanent sand barrier to termites (both western subterranean and Formosan termites). This will prevent termites from penetrating cracks in slab construction.

REFUSE AND RECYCLING AREAS:

- Place outdoor garbage containers, bins, and compactors on hard, cleanable surfaces, away from building entrances (at least 30 feet from doorways). Design site with properly graded concrete or asphalt pads to prevent rats from establishing burrows beneath them.
- Design site with solid enclosure that extends all the way to the ground level. Use metal or synthetic materials, not wood or chain-link fence, for example, to prevent rodents from gnawing and climbing the enclosure.
- If trash will be stored, design storage areas that can be closed off from the rest of the building.
- Locate storage areas for boxes, paper supplies and other materials in areas separate from where food or trash is stored. When stored together, these materials favor pests by providing food and shelter.

LANDSCAPED AREAS:

- When selecting plants, choose plants known to do well in the area intended for planting. Avoid those known to have a history of pest problems. Use resistant plant species and cultivars when available. Plant a variety of trees and shrubs. Check with your university or cooperative extension service for recommendations.
- Give preference to plants that shed a minimum of blossoms, seeds and fruits, since they may attract and support insects, rodents, and undesired birds.
- Design with diversity. Include a wide variety of plants in the landscape to reduce the pest damage potential.
- Provide a properly prepared site. Site selection is critical; the site must be

- compatible with the plants' requirements.
- Design landscaped areas with flexibility to allow for campus additions, which may change drainage, exposure to sunlight, ventilation, or other plant requirements.
 - Avoid crowding landscape plantings.
 - Group plantings with similar cultural requirements.
 - Install or retrofit fence lines and other turf or landscape borders with concrete mowing strips.
 - Avoid planting vegetation directly against buildings – this provides shelter and sheltered runways for rodents.
 - For the same reason, avoid planting dense vegetation that completely covers the ground.
 - Do not plant vines that climb building walls as these create runways for rodents and harborage for undesired bird species.
 - Plant trees away from buildings to prevent easy access to buildings for insects and rodents.
 - Give careful consideration to placement of deciduous trees. Leaves, which accumulate along foundations, provide harborage and sheltered runways for rodents.

INDOOR AREAS

FOOD PREPARATION AND SERVING AREAS (main kitchen, dining room, teachers' lounge, snack area, vending machines, and food storage rooms):

- Ensure that new kitchen appliances and fixtures are of pest-resistant design, i.e., open design, few to no hiding places for roaches, freestanding and on casters for easy, thorough cleaning.
- Provide space under and around appliances and equipment in kitchen areas to allow maximum ventilation and ease of (steam) cleaning.
- Use coving at floor-to-wall junctures to minimize build-up of debris and to facilitate cleaning.


- Slope floors in kitchen areas to provide good drainage after cleaning.
- Do not install pegboard in kitchens, animal rooms, or laboratories because it provides cockroach harborage.
- Ensure that all pipe insulation has a smooth surface with no gaps between pieces.

CLASSROOMS AND OFFICES:

- Ensure that new office and classroom furniture that is rarely moved (e.g., staff desks, bookcases, filing cabinets) is designed to permit complete cleaning under and around the furniture, or is designed to allow ready movement for cleaning purposes.
- Design or retrofit construction to provide adequate ventilation indoors, preventing trapped moisture and condensation (particularly in rooms with sinks).

STORAGE AREAS


Equip area with self-closing doors.

Although facility design is the emphasis here, it cannot stand alone. A strong preventive maintenance program is essential on a continuing basis. Poor sanitation or leaving entryways open will make even the best-designed and constructed facility susceptible to pest problems. Using the practices discussed above, together with scheduled, routine inspections and awareness of potential pest problems, can greatly reduce or eliminate the potential for infestations, especially when followed by responsible maintenance. If you follow these practices, you will reduce long-term pest management costs. For a bibliography and more resources about facility design and maintenance practices, go to www.schoolipm.info, click on "Managing Pests" in the left column, then click on "Pest Prevention and Management." 

– Sewell Simmons is with the Department of Pesticide Regulation, Pest Management and Licensing and can be contacted at 1001 I Street, Sacramento, CA 95814, by phone at 916-324-4245 or by email at ssimmons@cdpr.ca.gov

Ultrasonic Testing


Continued from page 6

tion work as required by 2001 CBC section 1701A.5 is being constructed and the welding inspector is no where to be found, but that is another article. 

– Clay holds the following certifications, DSA-Approved Assistant Inspector, DSA Masonry Inspector # 2865, DSA Pneumatically Placed Concrete Inspector # 3807, and AWS Certified Welding Inspector # 30751. Clay is a Plans Examiner for Willdan and can be reached at CSalzman@Willdan.com.

Is Your School Built on a Stable Foundation?

Continued from page 5

It is critical that geological investigations are completed prior to final structural design of school projects. The purpose of the geological review is to ensure that the geologic and seismic site conditions have been recognized and the propose mitigations are appropriate for the site characteristics. The end result is that geological consultants document geologic restrictions so that school districts can avoid or change design plans in response to potentially hazardous site conditions. The evolution of geotechnical engineering practices, code requirements and earthquake shaking levels has made geologic review an integral part of permit approval for school construction process. All facility managers must factor geologic review into project development in order to ensure timely completion and construction of schools. 

References:

- 1) California Public Resources Code, Chapter 7.8, Section 2690-2699.6, "Seismic Hazards Mapping Act".
- 2) California Code of Regulations-Title 24 2001 California Building Code.
- 3) DSA Interpretation of Regulations, IR A-4, "Geologic Hazard Report Requirements (Rev. 6/31/05).
- 4) California Geological Survey Note # 48, "Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals and Essential Services Buildings".

– Jack R. McMillan, is the Senior Engineering Geologist, School Review Project, California Geological Survey, 801 K Street, Sacramento, CA 95814-3531



Six Key Tools To Deliver The Best Possible Schools, On Time And Within Budget!

1. BID MANAGEMENT:

Day to day management of the entire bid process - from the Notice Calling for Bids through to Board approval.

2. CONTRACT MANAGEMENT:

Facilitate the District's responsibility as well as thorough monitoring of Contractor responsibilities and complete maintenance of records.

3. COST MANAGEMENT:

Carefully and critically monitor the budget as well as all job expenses to assure the District receives full value for every dollar spent.

4. QUALITY MANAGEMENT:

Provide strict quality assurance through all phases of the project, with continual updates to District personnel.

5. TIME MANAGEMENT:

Continuous oversight of all aspects of all schedules, from the bid process through occupancy, to assure on time completion.

6. SAFETY MANAGEMENT:

Facilitate management of all requirements to maintain a safe and healthy work environment.

We can help!

SCHOOL CONSTRUCTION TOOLBOX

Call today for a no-cost review of your projects.

P.O. Box 429, Fontana, California 92334 • Ph. (909) 350-3535 • Fax (909) 822-9661

KMTG

Your Legal Expert In School Facilities & Finance

since 1959

Successful school planning requires skillful negotiations, sound decision-making and expert legal advice. We know from experience. We can help.

- Property Acquisition
- Bond Counsel & Bond Financing
- Bond Elections
- Operational Decision-making
- Campus Construction
- School Facility Improvement Districts
- Developer Negotiations
- Facility Management



Working hard to help school districts succeed

Sacramento
916.321.4500

Bakersfield
661.864.3800

www.kmtg.com



ORRICK

**CALIFORNIA'S TOP-RANKED
PUBLIC FINANCE LAW FIRM**

Providing bond counsel services to school districts throughout California, Orrick is committed to providing cost effective and innovative services and solutions for all types of public finance matters.

For more information, please contact
publicfinance@orrick.com



**Atkinson, Andelson, Loya,
Ruud & Romo**

**Contracts and
Bids**

Contract Preparation • Public Contract Code Compliance •
Bid Specification • Breach of Contract • Bid Protests • Claims

**Constructions
Claims**

Construction Defects • Builder Liability • Engineering and Design •
Failures • Soil Erosion • Stop Notices • Bond Claims • Delay Claims

Finance

Asset Management • Bond Elections and Issuance • Lease Financing •
Mello-Roos • Non-Profit Organizations

Real Property

Developer Fees • Eminent Domain • Joint Use Facility Agreements •
Leases • Sales & Exchanges • Redevelopment Matters •
School Site/Real Property Issues • Environmental Regulation • CEQA

**Construction-
Related Labor**

Prevailing Wage • Certified Payroll Reports • Apprenticeship • Project
Labor Agreements • OSHA • Labor Compliance Programs

Cerritos
(562) 653-3200

Pleasanton
(925) 227-9200

Riverside
(951) 683-1122

Sacramento
(916) 447-4300

San Diego
(858) 485-9526

www.aalrr.com

Providing legal services to California's school districts for over 25 years.



Representing School Districts from Yreka to Chula Vista,

Contractor Compliance and Monitoring, Inc.

staff has 23 consecutive years of experience in prevailing wage and labor compliance issues.



1200 6th Ave., #200
Belmont, CA 94002
Telephone: (650) 551-5583
Fax: (650) 551-5584

Southern California Office
Telephone: (619) 472-9065
Fax: (619) 472-9067

When you need Labor Compliance assistance, call on our experienced and professional staff.

Your Ad
Could be Here!

For more information about Advertising visit the C.A.S.H. website at www.cashnet.org in the members only section or contact Shannon Mahoney; sfife@m-w-h.com (916) 448-8577



LUNDGREN MANAGEMENT

**Program, Project &
Construction Management**



***Managing School Construction Programs
through Trust, Teamwork, and Leadership***

Los Angeles Central Valley Inland Empire
661.257.1805 661.324.4144 909.941.3200

www.lundgren.net



Solving Construction Puzzles is our Business



We love a challenge.

If you would like information on utilizing design/build, construction management, program management, implementation planning, distressed project assistance or general contracting, contact McCarthy.

Newport Beach 949-851-8383 • Sacramento 916-786-3833 • San Francisco 415-397-5151



Your legal resource in building
the best learning environment for
the current generation ...

and beyond.

Public Facility Attorneys

- Land Acquisition
- CEQA
- Contracts and Construction
- Labor Compliance
- Litigation

ORBACH, HUFF + SUAREZ LLP

OFFICES

Suite 575
1901 Avenue of the Stars
Los Angeles, CA 90067

310 788-9200 • PHONE
310 788-9210 • FAX

info@ohslegal.com

17th Floor
1212 K Street
Sacramento, CA 95814

916 503-3174 • PHONE
916 503-2401 • FAX

SCREEN THE SUN, KEEP THE FUN!



Playgrounds



Eating Areas

- **DSA APPROVED!**
- Shields up to 95% of the sun's UVB rays & helps prevent skin cancer
- Adds distinction and aesthetic appeal to any school location
- Preserves and protects playground and school equipment
- Add school names and logos to over 30 available fabric colors
- Pre-engineered modular and custom structures available



1-800-50-SHADE (507-4233)
www.shadestructures.net

Shade Structures has regional offices throughout the state of California.



© 2005 Shade Structures is a Division of LSA Associates, Inc.

LSA

LSA ASSOCIATES, INC.

*Helping School Districts Through
The Environmental Process*

CEQA EIRS & INITIAL STUDIES

TRAFFIC & CIRCULATION

SITE ANALYSIS

AIR QUALITY & NOISE

BIOLOGY

CULTURAL RESOURCES

Offices throughout California

www.lsa-assoc.com

Irvine

949-553-0666

Berkeley

510-540-7331



SEVILLE GROUP



Over \$6 Billion in CA K-12 Bond Management



- ✓ Program Management
- ✓ Project Management
- ✓ Construction Management
- ✓ Project Labor Agreements
- ✓ Labor Compliance
- ✓ Dispute Avoidance & Resolution
- ✓ Troubled Project Turnaround
- ✓ Staff Augmentation
- ✓ Management Consulting
- ✓ Facility Condition/Needs Assessment
- ✓ Master Planning
- ✓ Bond Program Audits (Performance & Financial)

THE SEVILLE GROUP, INC.
 199 South Hudson Ave.
 Pasadena, CA 91106
 (626) 395 7474

www.sevillegroup.com

INNOVATIVE SOLUTIONS, PROVEN EXPERIENCE



Services
 Programming
 New School Design
 Modernization
 Remodeling
 Renovation

Disciplines
 Architecture
 +
 Structural Engineering
 Mechanical Engineering
 Electrical Engineering
 Civil Engineering

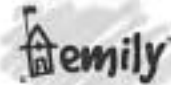
Motto
 Be Creative

Announcing

Placer County Office of Education
 Dry Creek Joint Elementary School District
 Special Education Center

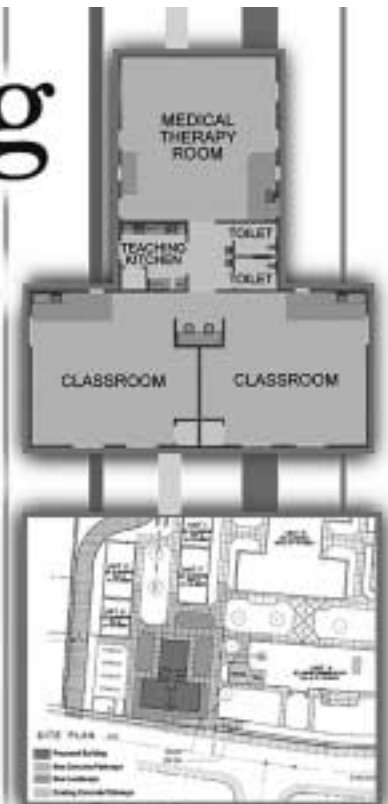
**NO MODULAR CONSTRUCTION - WOOD FRAME
 SLAB ON GRADE - PRE-APPROVED DSA DESIGN(PC)
 BUILT ON SITE BY GENERAL CONTRACTOR**

ATI Achitects and Engineers
 pcaires@atiae.com



REGIONAL OFFICES:

SAN FRANCISCO - 925.648.8800 SACRAMENTO - 916.772.1800
 SAN JOSE - 831.431.2220 SOUTHERN CALIFORNIA - 949.764.9200



Can you hear me now?

Yes, they can.

Bard's "Quiet Climate" is 50% quieter than previous models. With noise levels this low, the only sound students hear is the teacher's voice.



Call toll-free or visit our website today and learn how you can improve classroom ventilation and comfort with Bard.

Distributed by **Geary Pacific Supply**

Phone: 800-444-3279 ext. 122 • Fax: 714-279-2940
www.gearypacific.com

Shaping The Future For

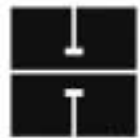
SCHOOL DISTRICTS

One Project At A Time



Since 1974, our program managers, construction managers, architects, and engineers have been serving the specialized needs of California School Districts and other public agencies.

- Program Management
- Project/Construction Management
- Design Oversight
- Value Engineering
- Constructability Reviews
- Scheduling
- Facility Assessments
- Bid & Award Management
- Move Management
- Labor Compliance Program Implementation



Harris
harris-assoc.com
800.827.4901

Harris & Associates is currently ranked 29th in Engineering News-Record's Top 100 Construction Management firms in the United States.

www.vanir.com

VANIR

VANIR CONSTRUCTION MANAGEMENT, INC.

Program Management
Project Management
Construction Management
Master Planning
Constructability Review
Scheduling
Cost Estimating

ACCOUNTABILITY

EXPERIENCE

888.912.1201

California Schools
& Community College
Insurance Specialist Since 1972

Save Time and Money!

on School Construction with
Owner Controlled Insurance Programs

With more than 450 member districts our
Statewide Educational Wrap Up Program (SEWUP):

- Transfers risk away from Owner
- Provides higher coverage limits and preferred insurance rates
- Covers Owner and all contractors under same policy

Keenan
Associates



(800) 654-8102 • (310) 212-3344

www.keenanassoc.com

www.sewup.org

LABOR COMPLIANCE PROGRAM

We can also help with your
Labor Compliance
Program!



WORD IS GETTING AROUND!

Throughout California, there's talk of a Labor Compliance Program that's operated by construction professionals where support and protection of the District is comprehensive, dealings with contractors are "trade smart", cordial and cooperative and costs are low and fixed. If that is what you've heard, you've heard about

Golden State Labor Compliance

Give us a call. You'll be glad you did.

1-800-834-7144



7th Largest Educational Builder in the Nation



License No. 302007

GENERAL CONTRACTING • CONSTRUCTION MANAGEMENT • PROGRAM MANAGEMENT • DESIGN-BUILD

618 San Fernando Road San Fernando, CA 91340 818.898.1521 T 818.361.9208 F www.bernards.com



Jack Schreder & Associates

Governmental Relations Consultants

"Planning for the Future of California's Public Schools"

- ✓ **School Facility Program**
Construction & Modernization Facilitation
School Facility Program Eligibility Reports
Audit & Close-Out Assistance
- ✓ **Redevelopment Revenue Calculations**
- ✓ **Facility Planning & Demographics**
Developer Fee Justification Studies
& Implementation
Facility Master Plans, Student Yield Studies
Enrollment Projections
Year Round Analysis and Studies
- ✓ **Facility Needs Analysis (Level 2 & 3 Fees)**
- ✓ **Local Facility Funding Options**

<i>Jack Schreder</i>	<i>Elona Cunningham</i>
<i>Kristen Schreder</i>	<i>Tom Fehr</i>
<i>Cheryl King</i>	<i>Tamara Caspar</i>
<i>Robin Goldsworthy</i>	<i>Lisa Roben</i>
<i>Kaisaundra Nootenboom</i>	

2230 K Street
Sacramento, CA 95816

(916) 441-0986
FAX 441-3048

- CEQA/NEPA Compliance
- Mitigation Monitoring
- Safety Assessments
- Technical Studies
- Facility Master Plans
- GIS Mapping
- School Site Selection & Feasibility Studies

WHAT'S NEW?
The topic of The Planning Center's latest informational newsletter is "Safe Routes to School." To request a copy, please call us at 714.966.9220, or click on "What's New" at www.schoolplanning.com

THE PLANNING CENTER
1550 Metro Drive • Costa Mesa, CA • 92626 • 714.966.9220

Bond approved?

It's time to call Mobile Modular.

Now the planning begins for modernization projects . . .

We can deliver the number and types of buildings to keep your students safe and sound while your renovations are under way. Single classrooms to entire campuses, specialty buildings for computer labs, libraries, restrooms or general office space, we've got the right type of building to meet your budget and timetable. Whatever situation is driving your facility crunch, no doubt we've helped others through it before.

Call us today to let us help take the hassles out of your classroom needs.



Your Project - Our Commitment

888-846-7220
MobileModularRents.com

Northern California | 5700 Las Positas Road | Livermore, CA 94551 | sfinfo@mobilemodularrents.com
Southern California | 11450 Mission Blvd. | Mira Loma, CA 91752 | lainfo@mobilemodularrents.com

C.A.S.H. Meetings, Conferences & Workshops

- July 26, 2005**
Tuesday
Environmental Challenges Facing School Districts (a.m. workshop) Designing Schools to Meet CHPS and LEED Standards (p.m. workshop)
Doubletree Hotel, 2001 Point West Way, Sacramento, CA
- July 27, 2005**
Wednesday
C.A.S.H. General Membership Meeting
1215 K Street, 14th Floor, Sacramento, CA
- July 29, 2005**
Friday
Environmental Challenges Facing School Districts (a.m. workshop) Designing Schools to Meet CHPS and LEED Standards (p.m. workshop)
Ontario Airport Marriott, 2200 E. Holt Blvd., Ontario, CA
- August 2, 2005**
Tuesday
Environmental Challenges Facing School Districts (a.m. workshop) Designing Schools to Meet CHPS and LEED Standards (p.m. workshop)
Waterfront Plaza Hotel, Jack London Square, Oakland, CA
- August 23, 2005**
Tuesday
TBD Workshops
Doubletree Hotel, 2001 Point West Way, Sacramento, CA
- August 24, 2005**
Wednesday
C.A.S.H. General Membership Meeting
1215 K Street, 14th Floor, Sacramento, CA
- August 26, 2005**
Friday
TBD Workshops
Ontario Airport Marriott, 2200 E. Holt Blvd., Ontario, CA

Monthly C.A.S.H. meetings are held from 11:00 a.m. to Noon in Sacramento. The monthly meetings are always scheduled to coincide with the monthly meetings of the State Allocation Board on the fourth Wednesday of the month, except in November and December, to enable C.A.S.H. members to attend the SAB's afternoon session. Both SAB meetings and General membership meetings are subject to change.



CALIFORNIA'S
COALITION
for ADEQUATE
SCHOOL HOUSINGSM

c/o Murdoch, Walrath & Holmes
1130 K Street, Suite 210
Sacramento, CA 95814

PRESORTED
FIRST CLASS
U.S. POSTAGE
PAID
SACRAMENTO, CA
PERMIT #2840

**POSTMASTER – TIME VALUE
PLEASE DELIVER PROMPTLY**