

A background image of a construction site. A large crane is lifting a large, rectangular, orange-colored metal structure, possibly a roof panel or a large door, into the air. The structure is suspended by cables. In the background, there is a large, curved, yellow metal structure, likely the roof of a building under construction. Several workers in hard hats and safety gear are visible on the ground, some standing near the base of the crane and others further back. The sky is a clear blue with some light clouds.

# PROJECT DELIVERY HANDBOOK

**A Guide to California School and  
Community College  
Facility Delivery**

2017

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This version incorporates changes resulting from legislation including AB 2316 and SB 693 (2016).

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## PREFACE

All delivery methods have advantages and disadvantages. Different projects can have different delivery methods. What works best for you and your project should define the method, not vice versa.

This Handbook was produced by the Association of California Construction Managers (ACCM) for use by California school district and community college district staff and board members. The ACCM Handbook gives a practical outline of services provided by construction managers and a useful description of the various delivery methods of educational facilities available to districts.

While construction management services are utilized in a variety of construction sectors, they are increasingly sought out by school and college administrators as a way to ensure that trusted professionals are available to support staff resources. The members of ACCM are leaders in the field of managing educational facility construction.

The ACCM Handbook provides an independent resource for districts trying to choose from among the diverse project delivery methods that are available. The need for this Handbook stems from ACCM's recognition that there is no single project delivery method that meets all individual needs. Each of the contributing editors has a preferred delivery method. However, ACCM members recognize that the appropriate delivery method for a particular project will depend on a variety of unique circumstances. This guide provides a description of each delivery method, advantages and disadvantages, reasons for selecting a particular method, and simple steps to implement each method. In addition, the ACCM Handbook provides a project delivery selection matrix that districts may use to compare and contrast individual delivery methods and the requisite services a construction manager can provide you given your particular district needs.

School districts using this Handbook should understand that if a school district is seeking, or plans to seek, state matching funds, they will have to meet the state prequalification requirements for prime contractors and mechanical, electrical, and plumbing subcontractors on projects exceeding \$1 million. For Lease-Leaseback projects, more subcontractors are required to be prequalified and prequalification is required even if state funds will not be requested.

We wish to extend our appreciation to the ACCM Board of Directors for their support and encouragement on this project. We especially wish to thank the Drafting Committee for their writing, reviewing and wrestling with what is an appropriate outline of education facility delivery methods in California. Those individuals who offered their time and perspective are:

Paul Bonaccorsi – WLC Construction Services Inc.  
Dick Cowan – XL Construction Company  
Bob Kjome – Roebbelen Contracting  
Ed Mierau – Neff Construction  
Kris Meyer – Ledesma & Meyer Construction Company Inc.

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## PREFACE

Users of this Handbook should remember that it is important to contact each of the State Agencies involved in the approval of education facilities early in the process. Each of these agencies is staffed by knowledgeable professionals who take pride in their contribution to building school facilities.

K-12 and community college districts should contact:

- Division of the State Architect (DSA), Department of General Services, State Architect  
[www.dsa.dgs.ca.gov](http://www.dsa.dgs.ca.gov)
- School Facilities Planning Division, California Department of Education (CDE), Division Director  
[www.cde.ca.gov/ls/fa](http://www.cde.ca.gov/ls/fa)
- College Finance and Facilities Planning Division, California Community Colleges Chancellor's Office (CCCCO), Assistant Vice Chancellor  
[www.cccco.edu/divisions/cffp/facilities/facilities.htm](http://www.cccco.edu/divisions/cffp/facilities/facilities.htm)
- School Property Evaluation and Clean-Up Division, Department of Toxic Substances Control (DTSC), Division Chief  
[www.dtsc.ca.gov/Schools](http://www.dtsc.ca.gov/Schools)

K-12 districts should contact:

- Office of Public School Construction (OPSC), Executive Officer  
[www.opsc.dgs.ca.gov](http://www.opsc.dgs.ca.gov)

Community college districts should contact:

- College Finance and Facilities Planning Division, California Community Colleges Chancellor's Office (CCCCO), Assistant Vice Chancellor  
[www.cccco.edu/divisions/cffp/facilities/facilities.htm](http://www.cccco.edu/divisions/cffp/facilities/facilities.htm)

For contractor registration requirements and PWC 100 project registration requirements contact:

- Department of Industrial Relations (DIR)  
[www.dir.ca.gov](http://www.dir.ca.gov)

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## HOW TO USE THIS HANDBOOK

This ACCM Project Delivery Handbook provides tools for understanding what construction managers do (Chapters 1 and 2), comparing delivery methods (Chapters 3 through 9), and selecting an appropriate delivery method for a specific project (Chapter 10). Comparing delivery methods allows a school district or community college district to analyze the resources and capabilities required and available to them on a specific project. This analysis puts the district in a position to achieve its facility construction goals on time and within budget.

This Handbook encourages early analysis of risks and resources. It also recognizes that any delivery method chosen will benefit from a collaborative process. Even where the delivery method itself may suggest potential partners (e.g. Design-Bid-Build, Design-Build, Lease-Leaseback, Piggyback Contracts, Developer Built Projects), retention of a construction manager to act as the district's agent can ensure pre-construction collaboration among the owner, the architect and a construction professional.

There is no one perfect delivery method for every situation. Just as each project has a number of common elements along with specific unique challenges, each delivery method also offers the user advantages and comes with some disadvantages. Before choosing a project delivery method, there are a number of factors that each district and their delivery team should consider when evaluating which method best suits a specific project.

While reviewing this information, the district needs to be aware of the following factors that may influence which method they may choose:

1. District staff capabilities
2. Time available to have project completed
3. Complexity and size of project
4. Level of district control desired
5. Type and size of contractors that you want to attract
6. Project budget and funding
7. Predominant trade practice in region
8. Board and staff openness to alternative methods
9. Appropriate community and business participation
10. Level of acceptable legal and financial risk

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## Chapter 1 - WHAT IS CONSTRUCTION MANAGEMENT?

Construction Management (CM) is a professional service that utilizes proven management techniques during the planning, design, construction, and post-construction phases of a project for the purpose of controlling the three major components of time, cost and quality. Construction Management is a service that specifically was created to promote the successful execution of capital projects for owners. These projects can be highly complex or simple in scope. ACCM views Construction Management as a professional service afforded to you by construction managers, best selected on a qualifications basis. Separate and distinct is the selected delivery method, for which the means of procuring your project may be by either "best value" or "low-bid" bases.

Construction Management is the practice of professional management applied to the planning, design and construction of projects from inception to completion for the purpose of controlling time, scope, cost and quality.

The terms *Construction Management*, *Project Management*, and *Program Management* are not used consistently in California and the U.S. One concept is that Construction Management is managing only during the construction phase, while Project Management is managing the creation, initiation, planning, design, agency approval, and construction of the project and includes responsibility for the scope of equipping, furnishing, and staffing the project. A *program* is a family of projects linked by a common set of objectives or by geography. Program Management covers the sourcing of program funds, including planning bond sales and issuances, retaining the staff to manage the program, including pools of designers, geotechnical engineers, California Environmental Quality Act (CEQA) experts, project inspectors, and testing laboratories, as well as creating budgets for program objectives such as ADA compliance or energy reduction budgets, creating criteria for designs, furnishings, and equipment, running a public relations or communications program, and many other functions.

The best practice and best value is to hire the construction manager and define the project delivery methods early so that the entire project can be completed in the shortest time, at the lowest cost and with the highest quality. Selecting the right delivery method will depend on the nature of the district's available staff expertise, tolerance for risk, ability to make early decisions and the complexity of the project.

There are a range of professional services that a construction manager can provide to assist in the facility planning, design and construction process. The following is a comprehensive list of services available at each of the five principal stages of a project ranging from planning through design and construction, to post-construction.

### Planning and Pre-Design Stage

- Prepare facility master plans, including condition assessment, site and community needs assessment and analysis of demographic projections.
- Assist with design procedures and district design standards.
- Develop site selection analysis and manage acquisition.
- Develop the program/project management plan to document program/project goals and performance requirements.

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- Develop a project management plan to include procedures for team communication, review, reporting and approval.
  - Facilitate a collaborative team of professionals.
  - Develop and implement strategies to interact with the public.
  - Develop preliminary scope and budgets.
  - Determine total funding requirements.
  - Establish and implement management information and reporting systems.
  - Establish and monitor master budgets and schedules.
  - Acquire conceptual estimating services.
  - Assist in procurement of consulting services, including developing Request for Proposal/Request for Qualifications (RFP/RFQ), interview processes and contract negotiations.
  - Develop phasing plans.
  - Develop bidding strategies.
  - Prepare front-end specification documents.
  - Create websites for reporting to the community.

#### Design Stage

- Develop and implement detailed design schedules.
- Develop detailed component cost estimates at every design submittal.
- Resolve design team constructability questions.
- Perform value engineering and life-cycle cost evaluation.
- Perform bid-ability and constructability reviews.
- Develop contract document requirements for safety program.
- Review designs for each phase of architect/engineer submittal.
- Assist with agency site review and approval process.
- Assist with funding applications and reporting process.

#### Pre-Construction and Procurement Stage

- Perform bid marketing services and creation of prequalification documents.
- Perform community and contractor outreach.
- Ensure bidders meet eligibility.
- Implement contract award process.
- Conduct pre-bid conferences.
- Ensure Department of Industrial Relations (DIR) compatible payroll reporting software is used.
- Coordinate bid process.
- Develop complete bid documents to assure responsive bids, while avoiding protests.
- Create construction phase procedures.
- Assist in reviewing and analyzing bids and selecting contractors.
- Assist with agency review and approval process.

#### Construction Stage

- Perform construction administration (monitoring, processing, reporting and evaluation of construction activities).
- Serve as the owner's representative and coordinate with other owner consultants.



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- Conduct progress meetings to review and facilitate resolution of any items that may impact the construction process.
  - Perform construction scheduling (creation of preliminary schedule, review and impact analysis of contractor's schedule).
  - Manage change orders (evaluation, recommendation, and processing).
  - Monitor the construction process to anticipate difficulties, resolve issues early, and keep work flowing (daily progress logs, videotaping, and digital photography).
  - Administer progress payments to assure that work milestones are met and that expenses are paid in a timely manner.
  - Ensure a California Occupational Safety and Health Administration (Cal/OSHA) compliant safety program is required by each contractor in the contractor document.
  - Coordinate punch list activities.
  - Coordinate quality management (inspection services and quality assurance).
  - Coordinate outside agency activities and interactions with the construction process.
  - Perform cash flow projection.
  - Manage occupancy of new school.

#### Post-Construction Stage

- Manage compliance with close-out process.
- Manage commissioning and start up.
- Manage warranty programs.
- Perform agency and contract close-out and certification, including reconciliation with budgets.
- Administer claims management and mitigation.

#### Selecting a Construction Manager

When the district decides that its staff cannot or should not manage a new school project, we suggest the district consider engaging a construction manager to provide these Construction Management services. We recommend that the district prepare a Request for Qualifications (RFQ) or Request for Proposals (RFP), and advertise and/or send the RFQ/RFP to qualified firms. ACCM provides a model RFQ/RFP, available at [www.accm.com](http://www.accm.com). We also suggest that a construction manager be hired early in the project planning stages for the best results. This should be done at the same time the district is hiring the architect. It is difficult to form a relationship in a month or two for a construction period of one year to three years.

To achieve the greatest benefits from early collaboration, once a construction manager is hired there needs to be:

- Clear definition of the scope of work for all district consultants.
- Clear definition and agreement of the total project budget (hard and soft costs).
- Clear definition of the master project and construction schedules.
- A single point of contact for project decisions and district coordination for the pre-construction and construction phases.

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## Chapter 2 - AGENCY CONSTRUCTION MANAGEMENT

### **A.** Description

Agency Construction Management is a service in which the construction manager is responsible exclusively to the district and without competing economic interests at any stage of the project. The agency construction manager offers advice, without conflicting financial interest. Construction Management services are sometimes also requested under the categories of project management or owner's representative.

Agency Construction Management is not a delivery system per se but rather a service utilized by a district to manage a project, or projects, delivered in any manner (e.g., Design-Bid-Build, Construction Manager at-Risk, Design-Build, and Lease-Leaseback). The use of Agency Construction Management during every stage of the project, beginning with the original concept and project definition, maximizes the benefit of this service. DSA has issued IR A3 affirming that CMs may perform duties which might otherwise be performed by the district, such as acting in the selection of designers, inspectors, and laboratories, negotiating scope and terms of contracts and administering these contracts and monitoring the duties required. IR A24 specifically prohibits CMs furnishing the services of project inspectors if they furnish any other CM services to the district.

### **B.** Enabling Legislation

In the State of California, a construction manager contracting with a district to perform construction management services must either be a California licensed Class B general contractor, architect, or engineer [see Government Code Section 4525 and Public Contract Code Section 3300]. Government Code Sections 53060 and 4526 provide that construction management services may be procured by a district in a similar manner to those of an architect or other professional service providers. Education Code Section 17072.35 provides that construction management services are fundable by the School Facility Program (SFP). Education Code Section 17070.50 requires a competitive process prior to procuring construction management services.

### **C.** Relationship of the Parties

Agency Construction Management is a professional service where the construction manager contracts with a school district to manage and oversee the design and construction process without a financial interest in the construction contracts. Construction management fees may be either hourly not-to-exceed, a fixed negotiated price, or a percentage of bids. These relationships remove a financial incentive for change orders or other cost increases. The construction manager holds no sub or prime construction contracts and manages the efforts of the design disciplines, other consultants, and those of either a general contractor or multi-prime trade contractors.

In Agency Construction Management, the construction manager assumes the position of professional advisor or extension of staff to the district. The district holds both the design contract(s), and the construction contract(s). Whereas the architect retains design responsibility, the primary cost and performance risks are placed on the contractors. These risks include failure of subcontractors to perform, material price increases, or trade labor availability. Risks on the contractor also include the costs of performing re-work. The term *agency* implies a delegation of function to the construction manager by the

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district. The necessity for openness and candor between the construction manager and district is paramount. Agency Construction Management is a service that is offered by many types of firms. When choosing any representative it is critical to evaluate their qualifications and expertise to meet the project needs.

An Agency Construction Management firm can manage a variety of delivery methods. During construction, the construction manager performs oversight services similar to those of a district employee with responsibility for the physical construction. In this manner, the district can select a trusted construction management firm to oversee the district's contracts with a general contractor or in lieu of a general contractor, performing services via a separate and unique set of contractual documents. Agency Construction Management is often used to represent the district's interests in Construction Management Multi-Prime, Design-Build, Lease-Leaseback and for Developer Built schools.

Construction usually starts after the design has been completed. This allows for a thorough review of the design documents by the agency construction manager. During the review period the district can modify the design prior to the construction contract being let. The district also benefits from design and construction expertise without any conflicts of interest, as there is no incentive for increased construction management fees.

Construction contractors retain responsibility for means, methods, techniques and sequence of construction; however, the construction manager as an agent of the district manages the general contractor.

**D. Points for Consideration**

1. This can be a qualifications based selection.
2. It is suitable for any delivery method.
3. The construction manager works directly for the owner as a knowledgeable advocate for the owner's interests.
4. The construction manager acts as the district and has no financial conflicts of interest.
5. The construction manager helps the district maximize control over the project, providing expertise for cost/time/quality benefits.
6. The construction manager facilitates pre-construction services with construction expertise during design.
7. The construction manager provides supplemental project staffing for the district.
8. The district may delegate district decision making authority to the agency construction manager.
9. The district holds all contracts (design and construction) and retains all payment and other contractual liabilities.
10. There is potential for duplication of effort among staff, other professionals and construction manager as agent, unless responsibilities are clearly defined.
11. If the Agency Construction Management has been delegated agency decision making authority, the district should require Professional Liability Insurance.

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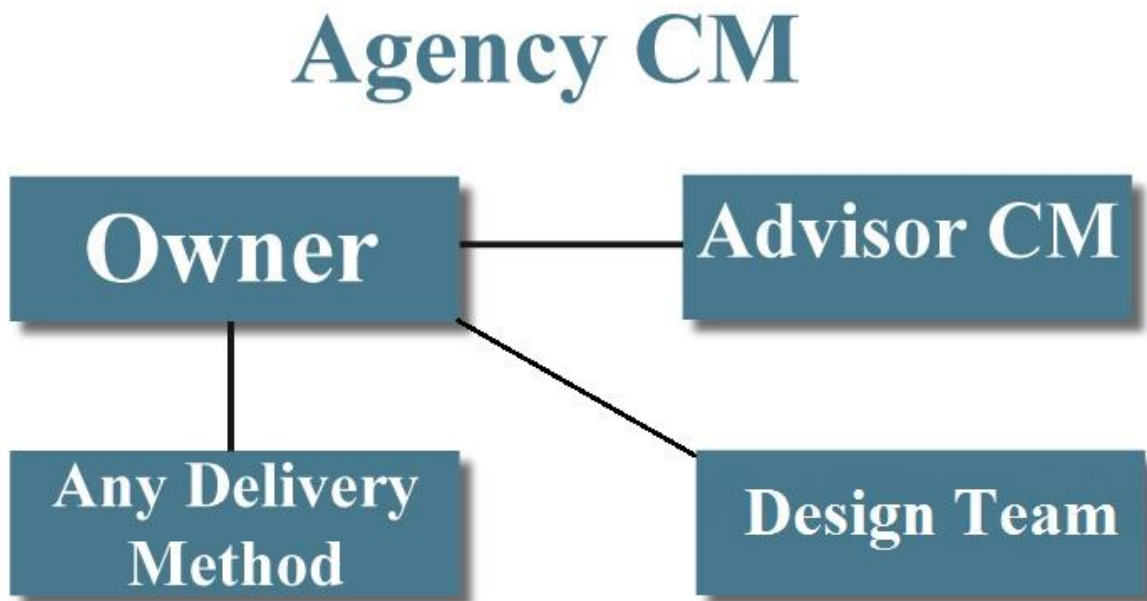
## Simple Steps to Implement

1. Develop a description of the projects for Construction Management.
2. Evaluate the skills and resources (time, experience, etc.) that your staff has available to contribute to overall management of the construction process.
3. List the skills and services that you will need a professional construction manager to provide.
4. Develop preliminary selection criteria based on those skills and services along with other important needs relevant to the culture of your district.
5. Develop a RFQ or RFP to allow you to select the most appropriate firms for an interview and final selection (ACCM has developed a model RFQ/RFP, available at [www.accm.com](http://www.accm.com)). The responses and interviews will help you to fine tune the specific services that will be most useful for your district.
6. Negotiate the services and fee that best fit your needs. Be prepared to discuss how many and which services apply to your project or program in order to develop the best value.
7. Reach agreement on the final contract terms for Board approval.
8. Welcome the construction manager aboard and begin meetings with relevant staff to ensure everyone understands the construction manager's role and responsibilities to the district.

For more information, please review the DSA's Interpretations of Regulations:

- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)

The following chart is an example of the relationships of the parties in an Agency Construction Management scenario.



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## Chapter 3 - DESIGN-BID-BUILD

### A. Description

Design-Bid-Build (DBB) is the project delivery approach that was used for most of the 20<sup>th</sup> Century to complete public sector projects. The DBB model segregates design and construction responsibilities by awarding them to an independent private architectural firm and a separate private contractor. By doing so, DBB separates the delivery process into three direct phases: 1) design, 2) bid, and 3) build (construction).

During the design phase, a public agency awards a design contract, using a qualifications-based approach, to an architectural firm providing the best experience in the project type. The architect is responsible for all agency approvals as well as for completing a final project design and providing detailed construction drawings, specifications and supporting documents.

In the bid phase, the owner uses the documentation prepared by the architect to assemble construction bid documents. Eligible contractors are invited to submit competitive, lump-sum bids, and the owner awards the construction contract to the contractor submitting the lowest, responsive, responsible bid for a total contract price.

The project then moves into the build (construction) phase, with the owner retaining responsibility for monitoring the contractor's performance. DBB is most frequently done using a lump sum bid contract, but unit prices are sometimes used.

### B. Enabling Legislation

California Public Contract Code requires that California Public Entities must award public works contracts to the lowest responsive, responsible bidder. These bidding procedures are contained in the Public Contract Code (see Sections 20110 et. seq.). The intent of the Legislature in enacting this code was to ensure all qualified bidders have an opportunity to enter the bidding process, thereby stimulating price competition.

### C. Relationship of the Parties

#### Owner

First and foremost, the owner wants the project constructed on schedule, at the original architect's estimate, and at the owner's construction budget. A public entity must answer to an elected governing board and to the community. Accountability for project delivery may be a critical element of future success. The owner is accustomed to maintaining a high degree of control during the design, bidding and construction process. This desire to retain control over design decisions, whether they are major decisions that influence project configuration and construction cost, or less cost-critical but emotional items such as aesthetic finishes and fixtures, may be an important owner objective.

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## Contractor

The contractor's objectives are quite different. The contractor is in business to make money, build the project without changes and complete it on time. The shrinking number of qualified general contractors is a testimonial to the risks involved in a fixed price contract environment. The higher the design quality, the more clearly the contractor is given the rules for bidding the work and how the contractor will be paid for the work performed, the more effectively the contractor will understand and price the risks. This will directly influence what the owner pays for the project. Because the owner-contractor relationship is largely influenced by statutory low-bid requirements, the potential for conflict is significant.

## Architect

While the design architect (architect of record) also wants to make a profit, the architect is not generally as exposed to a loss, nor as likely to achieve a profit "bonus," as is the contractor. Thus, the profit drive may differ from the contractor's. The design architect also seeks innovation for the exposure and future business benefits that innovation can bring. Innovation may lead to untried construction techniques by a particular low-bid contractor, and result in potential conflicts. To the extent that contractor qualifications and contracting approach will affect the overall success of the project, the architect also seeks the most qualified contractor on the project and a well thought-out work plan. This may or may not be the contractor having the lowest responsive bid. To the extent that construction innovation can lead to cost savings and a happier owner, the design architect should be motivated to foster open communication and efficient review processes that allow these ideas to be brought forward.

Under DBB, the project's design and construction are contracted separately. The owner must choose an architect/engineering firm to design the project. Professional design services for public projects are selected on the basis of qualifications by the owner, negotiating a fee after selection. Contracts for construction services are then obtained by competitive bidding. After the design process by the selected team of architects and engineers, the owner then advertises to solicit bids from construction firms. The winning firm becomes the general contractor, responsible for overall completion of the project using the firm's own employees, sub-contractors, or a combination of both. The design and construction phases of the project are clear and distinct. Design documents are finished before the contractor becomes involved.

## D. Points for Consideration

1. DBB is a familiar project delivery method.
2. Design documents must be thorough and complete to enable contractor bidding.
3. Public Contract Code and legal decisions have set accepted and understood standards.
4. The architect or engineer of record works for the owner and represents the owner.
5. DBB requires competitive bidding with the lowest responsive initial price.
6. There is no early builder involvement.
7. Conflicts can arise between the architect and builder after design is complete and the builder is selected.
8. Bids higher than budget can present difficulty and delays for adjusting project costs.
9. The owner may lose time waiting for all design to be completed for a single bid format.

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**E. Simple Steps to Implement**

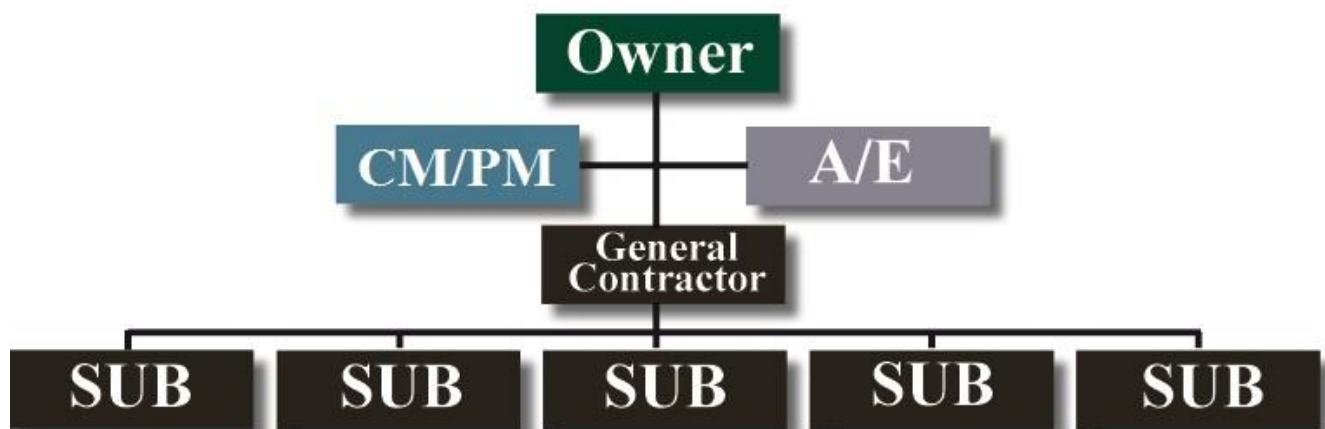
1. Select the architect and an owner's representative.
2. Adopt a project plan and construction schedule with your architect and representative.
3. Manage the design process.
4. Develop bidding and construction contracts tailored to the size and complexity of your project.  
Be cognizant of the complex legal framework for low-bid public works contracts. Ensure bid documents require DIR public works contractor registration and any prequalification requirements necessary for State funding, if applicable.
5. Validate compliance with the Department of Industrial Relations (DIR) contractor and sub-contractor eligibility requirements, such as being registered for public work contracting.
6. Obtain all off-site utility approvals before the bid.
7. Open the bids pursuant to statutory framework and award the contract to the lowest responsive, responsible bidder.
8. Obtain Division of the State Architect (DSA) approval of the design before contract award.
9. Put the completed design plans and specifications out to bid.
10. Notify DIR of the projects commencement with the PWC 100 form.
11. Commence construction.

For more information, please review the DSA's Interpretations of Regulations:

- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)

The following chart is an example of the relationships of the parties in a DBB scenario.

## Design-Bid-Build



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## Chapter 4 - LEASE-LEASEBACK

### A. Description

The Lease-Leaseback (LLB) delivery method uses an organization, now referred to as the Entity, to develop a new building or improve buildings on property the district owns. A construction management firm may serve as an Entity. The mechanism is for the Entity to execute a single instrument lease of the property giving it the right to develop the project, and giving it the obligation to develop the project, and to lease the improvements and the site back to the district, with the district owning the improvements when the leases expire. Different districts and their attorneys use different approaches for Entity financing, for selection of the Entity, for design responsibility, for lease terms after occupancy, and for method of selecting trade contractors. This flexibility is a primary attraction of LLB.

Pre-construction work can be provided by the Entity as part of the instrument but the final price after any adjustments and after DSA approval must have school board approval prior to commencing construction.

### B. Enabling Legislation

The statutes (Education Code 17406 for K-12) authorizing this approach are very broad; therefore many variations and different approaches to LLB have been refined, but a competitive best value selection process is required. Education Code Section 81335 for community colleges is similar to Education Code Section 17406, except the community colleges must advertise for bids and may use any selection strategy or format it chooses.

### C. AB 566 and SB 693 Requirements – K-12 Only

Requirements for LLB contracts:

- Requires prequalification of all contractors and subcontractors of all tiers and dollar amounts.
- Defines skilled workforce and requires 100% of the workforce to meet the definition.
- Requires, commencing January 1, 2016, 30% of the skilled workforce to be made up of graduates of Division of Apprenticeship Standards approved programs. Commencing January 1, 2018, the percentage increases by 10 percentage points a year until 60% of the skilled workforce meet apprenticeship requirements.
- Requires the apprenticeship provision apply to employers at every tier.
- Requires monthly certification of compliance with penalties for non-compliance, unless the project is completed pursuant to a Project Labor Agreement (PLA).

### D. Relationship of the Parties

Parties involved in LLB include the district and the Entity. The district's team will include legal counsel, the design team, testing and inspection, and potentially an agency construction manager representing the district's interests. The Entity team includes legal counsel, funding sources, a general contractor and trade contractors. The general contractor can act as the Entity.



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## Legal Counsel

Perhaps more than in any other delivery method, close coordination with a law firm is critical. This delivery method requires at least two contracts at a minimum: the site-lease and the facility-lease. In addition, these arrangements also require decisions about the extent or terms of required financing. An attorney's advice is also necessary to decide whether a validation process is advisable. This a legal proceeding recommended by some attorneys to obtain court approval of the lease terms.

## Developer Contractor Entity

LLB teams are selected based on qualifications with a best value process based on an estimated Guaranteed Maximum Price (GMP). Some districts also consider the lowest cost of the financing, and still others have a short list of Entity teams and then select one based on a competition of total project cost.

The legal structure of the Entity can vary. Some districts have retained firms who develop private projects as the Entity. Many districts retain firms who are general contractors. Some districts have retained joint ventures of teams including architectural firms. Some firms create a Limited Liability Corporation (LLC) to hold the leases and subcontract out construction to licensed contractors.

Many options are open for selecting the subcontractors and vendors who will work under the Entity. But AB 2316, passed in 2016, requires that if the district mandates identification of key subcontractors in the process of selecting the Developer Contractor Entity that those proposed have the rights of listed subcontractors in a public bid situation. The law also prescribes the process for advertising the selection of subcontractors and defines when they have the rights of listed subcontractors.

Districts can ask the Entity to take the risk of completeness and accuracy of plans. These arrangements are usually met by the Entity identifying the risks it accepts and including a contingency or allowance in the GMP for the project.

## Architect

The relationship between the Entity and the architect also is important. The Entity: 1) can perform design or participate in review and management of design performed by the district's architect, or 2) develop a price based on design done prior to its selection.

In most LLB arrangements, the district retains its traditional relationship with its architect. The district and the architect control the design of the improvements. Many LLB agreements call for the Entity to monitor designs as they are developed to ensure attainment of budget. Almost all LLB arrangements call for the Entity to offer cost saving ideas. Some LLB arrangements call for the Entity to take the responsibility to design the improvements.

DSA has issued IR A33 to affirm that, if the architect is under contract to a developer contractor it must still participate in the selection, approval, and supervision of inspectors and laboratories. And builders are required to not issue any direction to a designer under its control which would impair the designer from assuring that construction complies with DSA approved documents and the building codes.

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**E. Points for Consideration**

1. A district may use LLB to satisfy its need for financing the project.
2. The district has flexibility on who controls the architect.
3. The district may participate in selecting not only the Entity, but all of the eligible trade contractors and suppliers.
4. All trade contractors need to meet skilled workforce requirements.
5. Early trade contractor selection can avoid deferred approvals and schedule risk, and allow integrated project delivery and building information methods.
6. The school district can set a GMP very early in a project, or after pre-construction services.
7. Early trade contractor selection provides the owner with earlier project cost and schedule certainty.
8. The district and contractor must agree on lease terms and financing to ensure lease payments are made after occupancy.
9. Regardless of funding source, the district must perform a prequalification process as contained in Section 20111.6 of the Public Contract Code.
10. LLB has been subject to recent litigation that has validated the process but could lead to public concerns and the AB 2316 Entity competitive selection process is new. School districts should ensure they are knowledgeable about the best value process when considering this delivery method.

**F. Simple Steps to Implement**

Construction Management services are sometimes requested under the categories of project management or district's representative.

1. Determine whether LLB is the appropriate delivery method for your project.
2. Review the new Ed Code 17406 steps for developing preliminary LLB selection criteria with an understanding of the relative importance of design, construction and financing components of the project.
3. Obtain Board approval of the proposal and selection documents.
4. Determine and define if all or a portion of the site will be leased to the developer.
5. Consult with risk managers regarding insurance for leased site.
6. Ensure that any title or other land use or contractual limitations on the availability of LLB are researched and understood.
7. Work closely with the attorney you intend to have develop the instrument of site lease and facility lease.
8. Develop a RFQ or RFP to allow you to select the most appropriate firms for an interview and final selection. Interview appropriate firms.
9. Negotiate with the selected Entity the approach to the project: business terms, schedule, and method to set price, such as a GMP.
10. Complete the design, if not already done.
11. Obtain price proposals from subcontractors and vendors, select the trade contractors and vendors, set the GMP or other price, and sign (or amend) the leases and obtain Board approval.
12. Perform the work of the improvements.
13. Complete the site lease term payments.
14. Owner completes the Tenant Improvement Payments and payments for use after occupancy.

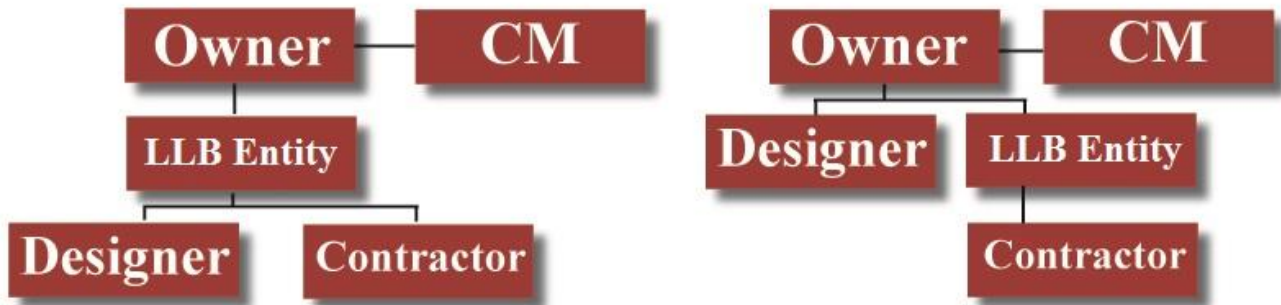
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For more information, please review the DSA's Interpretations of Regulations:

- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)

The following chart is an example of the relationships of the parties in a LLB scenario.

## Lease-Leaseback



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## Chapter 5 – CONSTRUCTION MANAGEMENT MULTI-PRIME

### A. Description

The Construction Management Multi-Prime (CM-MP) delivery method is bid out similar to the Design-Bid-Build method, but with individual trade bid packages for trade contractors, not a general contractor. Rather than subcontractors bid and selected by the general contractor, each package of trades is bid by the district, assisted by the construction manager. This delivery method significantly changes the trade contractors' relationship with the district by having them contract directly with the district rather than with a general contractor. The construction manager will prepare bid package summaries for all trades and the coordination of all of the bid packages required to build the project. The number of trades and bid packages can vary by project scope and size. The trade bid packages are publically bid pursuant to the public works low-bid selection process. Then the construction manager manages the contracts of each trade. The on-site construction manager replaces the general contractor's role during construction by providing scheduling, supervision, change order negotiations, and other activities required to build the project. This method allows the district to select the on-site management services by qualifications, rather than low-bid, while using the low-bid process for selecting prime contractors. Construction management fees may be either hourly not-to-exceed, fixed negotiated price, or a percentage of construction costs.

The district in a CM-MP delivery method assumes many of the risks of a general contractor; the district is responsible for trade contractor failure. Risks that remain with the trade contractors are material price increases and trade labor availability. Each trade contractor must secure a separate payment and performance bond pursuant to civil code. Many risks that would have been borne by the general contractor are thereby borne by the trade contractor.

### B. Enabling Legislation

In 1994, Construction Management was authorized by the State Allocation Board (SAB) as an acceptable delivery system. The SAB policy regarding Education Code Section 17719.3 authorized school districts to contract, as specified, for construction management services to assist in the development and/or implementation of a project under the Leroy F. Greene State School Building Lease-Purchase Law of 1976.

### C. Relationship of the Parties

The relationships between the owner and architect are similar to those described for Design-Bid-Build. But new parties are involved: the prime (trade) contractors. During the design phase it is best for the district, construction manager, and architect to agree on project scope, budget, and estimated time frames for on and off-site agency approvals, as well as the construction period and trade contractor scopes and phasing, so that documents can be prepared to meet the completion goals.

The trade contractors are more directly responsible for the success of a project with the CM-MP delivery method. Since the construction manager fills the general contractor's role in managing the multiple trades, it is the construction manager's responsibility to provide clear communication and coordination of trades. This includes the development of the scope content of each trade package and prime or trade contracts (this step is critical to make sure all the areas of scope of work and responsibility are covered).

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If communication is maintained per the bid documents, the relationship will grow and the project will be a success. It is beneficial to have the team meet early. An effective CM-MP process maintains trust and cooperation among team members. CM-MP provides the district with independent advice and cost transparency.

**D. Points for Consideration**

1. The district owner has more control of, and responsibility for, the construction phase schedule.
2. Trade contracts are procured as competitive lowest responsive responsible bidders.
3. Trade contractor bidding process is familiar to the district.
4. The district owner has the ability to re-bid a single, over-budget trade package without project delay.
5. The district owner has more flexibility of bidding and scheduling, allowing for multiple phases.
6. The construction manager provides construction expertise to assist in the entire design, planning, permitting and construction process.
7. Using multiple bid packages levels the playing field for participation by local trade contractors.
8. Trade contractor level bonding provides the advantages of prequalification without the disadvantages associated with prequalification.
9. The method provides the district comprehensive contract pricing transparency.
10. This method requires more prime contracts with the district for the construction manager to administer.
11. The construction manager is responsible for avoiding potential overlaps or gaps in the scopes of work.
12. The district accepts more risk by hiring multiple trade contracts directly.
13. Contracts with separate trades will make scheduling more important to avoid negative schedule impacts.
14. The total project price is not known by the owner until all trade contracts are awarded.
15. There is not a single guaranteed bonded price for the total project.
16. Regardless of funding source, district must perform a prequalification process as contained in Section 20111.6 of the Public Contract Code.
17. Under California law and depending upon the language in the construction management agreement and agreements with prime contractors, a construction manager on a multiple employer site may take on some of the additional risks associated with overall site safety.

**E. Simple Steps to Implement**

1. Determine whether CM-MP is the appropriate delivery method for your project.
2. Develop preliminary construction management selection criteria with emphasis on the ability to develop bid packages for multiple trades, including experience in dealing directly with subcontractors and suppliers.
3. Develop a RFQ or RFP to allow you to select the most appropriate firms for an interview and final selection (ACCM has developed a model RFQ/RFP, available at [www.accm.com](http://www.accm.com)).
4. Reach agreement on the final contract terms for Board approval.
5. Negotiate an appropriate cost for the construction manager's general conditions and appropriate fee.

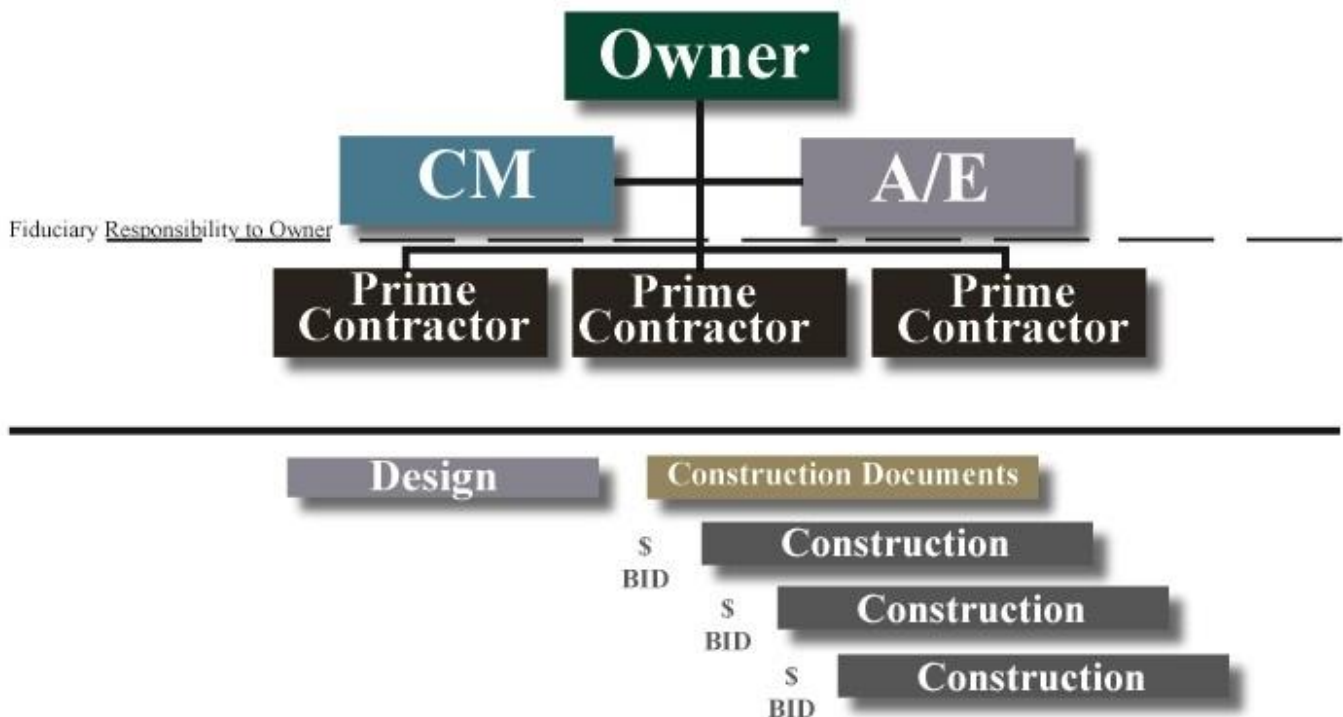
6. Welcome the construction manager aboard and begin meetings with relevant staff to ensure everyone understands the construction manager's role and responsibilities for trade contractors.
7. If planning project increments, select a design firm with complementary experience in designing projects using increments.
8. Use both the construction manager and the designer and develop bidding documents and trade contracts.
9. Be diligent about bidding and awarding trade packages pursuant to all public works requirements.
10. Commence construction.

For more information, please review the DSA's Interpretations of Regulations:

- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)

The following chart is an example of the relationships of the parties in a CM-MP scenario.

## Construction Management Multi-Prime



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## Chapter 6 - CONSTRUCTION MANAGER AT-RISK

### A. Description

Construction Manager at-Risk (CM at-Risk) is a project delivery method where a construction manager is first hired under a professional services agreement on a fee basis. This professional services agreement provides a blend of traditional Construction Management in the design and bidding stages. Before construction begins, the CM at-Risk is assigned the multiple prime trade contracts for the purpose of administration. The construction manager is at-risk for constructing the project for the given duration and that the multiple prime trade contracts contain 100% of the scope depicted in the contract documents. There is NO guaranteed maximum price in this arrangement (see *Inglewood* case cited below). The CM at-Risk manages changes to the contract with the trade contractors in a similar manner as multi-prime. This method is similar to the Construction Management Multi-Prime delivery method, except the construction manager takes on some risk in the implementation of the project. This transfer of risk can significantly alter the relationship between the district and the construction manager. A district choosing this delivery method should be as aware as the construction manager that the risks and relationship will change and engage in honest dialogue with each other to set the ground rules for success.

The use of a CM at-Risk, similar to the Construction Management Multi-Prime, is optimized if they are available at the earliest stages of a project. The CM at-Risk, in many cases, comes with a strong construction knowledge that ensures that the district's desires are properly reflected on and in the construction documents. This delivery method is subject to a variety of different risk levels and contract administration. This delivery method is sometimes also referred to as Construction Manager-General Contractor or Construction Manager with a Guaranteed Maximum Price. See the end of Section C for a brief description of the important elements of these approaches. DSA has issued IR A3 which states that during the design phase of a project any CM would become a CM at-Risk and may NOT participate in the selection, negotiation of contract scope or terms, or administration of contract for designers, inspectors, or laboratories.

### B. Enabling Legislation

Similar to Construction Management Multi-Prime as addressed in the preceding section, CM at-Risk is the multi-prime delivery method where risk for cost overruns is taken by the construction manager through careful planning and re-allocation of allowance and contingency sums associated with each of the trade contractors. Pursuant to Education Code Section 35160, commonly known as the "Permissive Education Code," schools are given broad authority to carry on activities or programs as long as they are not otherwise prohibited by statute or law. One limitation arises from the California Supreme Court case, *City of Inglewood v. Los Angeles Civic Center Authority v. Superior Court* (1972) 103 Cal.Rptr. 689, 692, which provides a construction manager is prohibited from guaranteeing a price since such a guarantee would be too similar to a competitive bid. This delivery method was challenged in the case *BRCO Constructors v. Folsom-Cordova Unified School District; Roebbelen Construction Management Services, Inc.* A judgement was filed by the court that stated the contracts in question were awarded to the CM at-Risk in accordance with Government Code 4526. The reasons cited were: all trade contracts were awarded in a public bid to the lowest responsible bidder; the construction manager had no control over means and methods of the trade contractors; there was no GMP; and the compensation for services is provided as a fee for services in lieu of profit on construction work.

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### **C. Relationship of the Parties**

In the CM at-Risk process, trade contract bids are submitted to and received by the district pursuant to Public Contract Code. The bids are accompanied by a bid bond and upon award and execution, the trade contractors provide payment and performance bonds as required by the terms of the contract, as well as Public Contract Code. The executed contracts are then assigned to the CM at-Risk to administer through the completion of the contract. The trade contractors retain responsibility of the means, method and techniques of construction. In the CM at-Risk process, the construction manager clearly dictates the sequence and schedule of the work within the required project duration. The construction manager also recommends which scope of work will be placed in each trade contract. In many cases, the construction manager is responsible for omissions in scope definition that are clearly shown in the construction documents. Contingencies are often included to manage that risk. Typically, the construction manager controls a portion of this contingency as part of the contract documents.

The district is tasked with hiring the most qualified construction manager for a particular project or group of projects. Districts have the ability to make a qualifications-based selection that leads to loyalty of that CM at-Risk to the district. In many situations, the CM at-Risk acts like an extension of the district staff.

The CM at-Risk process in most situations is a multi-prime approach where once the construction begins, the construction manager performs similar services to those of a general contractor. With the CM at-Risk delivery method, the construction manager ends with a project authorization under the master service agreement for each project that is based on professional services.

Construction Manager-General Contractor (CM-GC) or Construction Manager with a Guaranteed Maximum Price (CM-GMP) differ from the CM at-Risk model being presented here in that prior to the start of construction, the construction manager takes on all of the performance and payment responsibility for the project by taking on all of the low-trade bidders as subcontractors. The process used to assign the low-trade bidders to the construction manager is typically included in the trade contractor bidding documents. The construction manager essentially transitions to the role of a general contractor and in addition to assuming all of the responsibilities associated with the trade contracts, provides performance and payment bonds covering all of the work associated with the project. As previously alluded to in Section B, there is considerable controversy associated with this version of the CM at-Risk delivery method within the K-12 school construction field. It is extremely important that districts contemplating the use of this delivery method or one of its variations consult with their legal counsel prior to moving forward.

### **D. Points for Consideration**

1. The construction manager should be selected using a qualifications based selection process (Govt. Code 4526).
2. The district owner can have a fixed price for each trade contract based on complete design documents.
3. The trade contracts are procured as competitive lowest responsive responsible bidders.
4. The trade contractor bidding process is familiar to the district.
5. The owner has the opportunity to rebid a single, over-budget trade package.
6. The district owner has more flexibility of bidding and scheduling which allows for multiple phases.



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7. The construction manager provides construction expertise to assist in the entire planning, permitting, design and construction process.
  8. Multiple bid packages levels the field for participation of local trade contractors.
  9. There are increased CM at-Risk fees for the CM at-Risk's assumption of risk.
  10. There is not a single guaranteed bonded price for total project.
  11. There are no common standards for assumed risk in CM at-Risk.
  12. The construction manager relationship with district changes during the project process.
  13. The method could result in a potential decrease in the total number of trade contractor bids because of added bidding, bonding and reporting requirements.
  14. There are more contracts for district to administer, although much of the work is assigned to the CM at-Risk.
  15. The construction manager is responsible to avoid negative schedule impacts.
  16. If the district is requesting, or will be requesting, state funding for a project greater than \$1,000,000, it must prequalify all prime contractors, including general engineering contractors or general building contractors, and mechanical, electrical, and plumbing subcontractors.

**E.** Simple Steps to Implement

1. Determine whether CM at-Risk is the appropriate delivery method for your project.
2. Develop preliminary construction manager selection criteria with emphasis on the ability to develop bid packages for multiple trades including experience with dealing directly with subcontractors and suppliers.
3. Develop a RFQ or RFP to allow you to select the most appropriate firms for an interview and final selection (ACCM has developed a model RFQ/RFP, available at [www.accm.com](http://www.accm.com)).
4. Reach agreement on the final contract terms for Board approval.
5. Negotiate an appropriate cost for the construction manager's general conditions and appropriate fee.
6. Welcome the construction manager aboard and begin meetings with relevant staff to ensure everyone understands the construction manager's role and responsibilities for trade contractors.
7. Select a design firm with complementary experience in designing projects for multiple trade packages by use of phasing and other mechanisms.
8. Develop the design using the skill of both the construction manager and the designer and develop the trade package work descriptions, bidding documents and trade contracts.
9. Be diligent about bidding and awarding trade packages pursuant to all public works requirements.
10. Assign the trade contracts to the construction manager.
11. Commence construction.

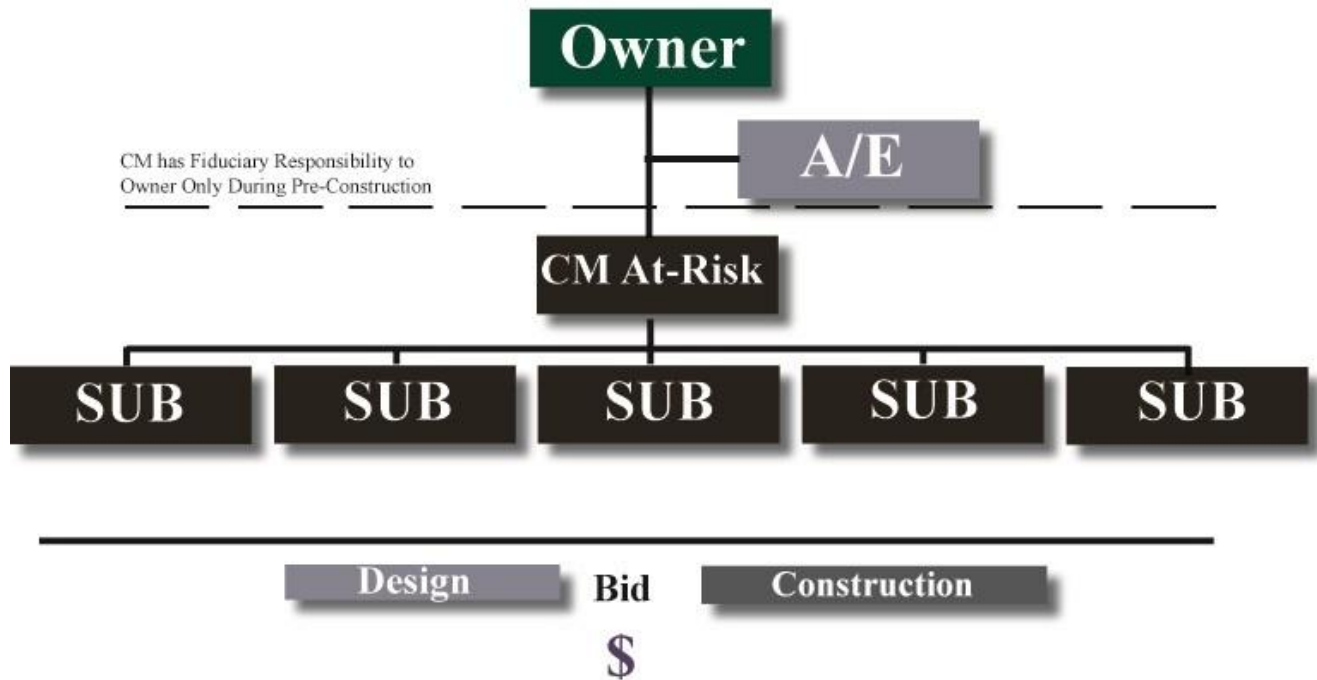
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The following chart is an example of the relationships of the parties in a Construction Manager at-Risk scenario.

## Construction Manager at-Risk



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## Chapter 7 – DESIGN-BUILD

### A. Description

Design-Build (DB) is a unique project delivery method whereby there is a single contract with one entity to both design and construct the project. It is recently re-emerging, nationally and in California, as an alternative to Design-Bid-Build and other delivery methods.

### Options

A typical DB project utilizes a two-phase procurement process. The first phase is a prequalification process, typically short-listing to three finalists. The second phase is the request for proposals, from which a best value selection process determines the firm with the proposal most advantageous to the district.

DB is an integrated process. The architect/engineer and general contractor are on same team from beginning to end. There are two prime players, the district and the Design-Build Entity (DBE). The DBE can take on many forms, such as contractor led, architect/engineer led, or a joint venture. But typically the DBE is contractor-led. Regardless of the form the DBE takes, there is only one contract between the district and DBE.

DB may be used on complicated or simple projects. The type of control a district has over the project varies from project to project with DB and can be dictated by the terms of the request for proposal. Please note that after the contract is signed, the district has the control specifically addressed in the contract. DB requires more input by the district up front, but less management later on.

### B. Enabling Legislation

A best value selection or lowest responsible bid is authorized by statute for K-12 and community colleges in California. Projects procured by the statutes to date have utilized the best value approach. DB competitions have emerged in the public sector as a means of achieving the benefits of DB while adhering to the need to award construction projects on a competitive basis.

Education Code 17250, et seq. specifies the provisions for DB use by K-12 school districts. The method may be used on all projects of \$1 million or greater\*. Education code 81700, et seq. specifies the provisions by community college districts, specifically Education Code 81702. The method may be used on projects of \$2.5 million or greater in community colleges and contains certain requirements school districts and community college districts must follow.

### C. Skilled Workforce Provisions – K-12 Only (AB 1358 and SB 693 of 2015)\*\*

- Requires prequalification of all contractors and subcontractors of all tiers and dollar amounts.
- Defines skilled workforce and requires 100% of the workforce to meet the definition.
- Requires, commencing January 1, 2016, 30% of the skilled workforce to be graduates of Division of Apprenticeship Standards approved programs. Commencing January 1, 2018, the percentage increases by 10 percentage points a year until 60% of the skilled workforce meet apprenticeship requirements.
- Requires the skilled workforce provision apply to employers at every tier.

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- Requires monthly certification of compliance, with penalties for non-compliance, unless the project is conducted under a Project Labor Agreement.

\*Reverts back to \$2.5 million in 2025

\*\*Sunsets January 1, 2025

#### **D. Relationship of the Parties**

Simply stated, under DB, the district is responsible for the program, performance requirements, and financing of the project.

The DBE is responsible for both design and construction. The architect is responsible for normal professional design responsibilities and is a member of the DBE. The relationships of the parties in DB procurement may be viewed on two levels, practical and contractual. Practical relationships have to do with qualifying the DB team for procurement, as well as working relationships during the design and construction phases of the project. Contractual relationships relate to the contractual associations and related legal obligations of the parties. The enabling legislation does not make a clear distinction between practical and contractual relationships, nor does it preclude the following reasonable descriptions. Because the success of working relationships in a DB project depends on an accurate understanding of roles and responsibilities, a detailed description follows.

##### Design-Build Entity

The DBE holds the contract with the district. This may be a corporation, partnership, joint venture, or other legal entity. In a practical sense, and during the proposal phase, the DBE may be thought of as the DB team, including the general contractor, architect, sub-consultants and subcontractors.

Unless the architect is the lead member or joint venture partner of the DBE, the architect of record contracts with the DBE. The architect may be in the lead position or a partner, but is usually a sub-consultant to the general contractor of the DBE. This does not prevent the architect from interacting with the district. DSA has issued IR A24 which notes that it is permissible for the designer of record to be responsible for construction of all provisions of the Ed Code 17250 or 81700 being followed. The DSA IR A33 cautions the DBE to not issue any instruction to designers which would impair their ability to ensure construction complies with DSA approved documents or building codes. It also affirms that the designers of record, even if under contract to a DBE, must participate in selection, approval and supervision of inspectors and laboratories.

The architect has a similar relationship with the district in developing the design as in traditional Design-Bid-Build with one notable exception. In a typical DB project, the architect is directly responsible to the contractor, and indirectly responsible to the district, for meeting the pre-established budget and timeline. The DBE remains responsible to provide design that conforms to the district's stated requirements and applicable codes.

##### Subcontractors

Trade contractors are under a subcontract agreement to the DBE. Subcontractors may provide a broad range of design and construction services to the DBE.

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## Construction Manager

A district may elect to hire a construction manager with DB expertise or use the district's employees as their staff. The construction manager may assist the district from the time of establishing the type of project procurement, through the selection process and continue during project design, construction and close-out. This representative is not part of the DBE and acts as an extension of the district's staff and acts only for the district interest in this project. The construction manager can be provided decision-making authority to bind the district.

### E. Points for Consideration

1. Teamwork is promoted because the general contractor and architect are on the same team.
2. A district can ask for a guaranteed cost during design.
3. The design risk shifts to the DBE.
4. There is a single point of responsibility for the district with fewer changes.
5. Only one RFQ and/or RFP is required for design and construction.
6. Only one contract is needed for both design and construction.
7. The DBE may be selected on statutory best value basis rather than traditional lowest responsive responsible bid.
8. The district needs to have more involvement earlier in the design process, but less involvement is needed after design begins.
9. The method has the potential for faster delivery, particularly for prototype designs.
10. DB requires a new learning curve for districts and agencies.
11. The owner and criteria designer need to create performance standards before DBE design begins.
12. There are unique statutory requirements for selecting the DBE and subcontractors.
13. The insurance and bonding details need thought and clarity.
14. There is a potential for less control by district of design and design details.
15. There is political resistance among those unfamiliar with the method.

### F. Simple Steps to Implement

1. Determine whether DB is the appropriate delivery method for your project.
2. Develop a description of the facility needs and ensure that your project and your staff will meet all of the statutory requirements for use of this delivery method.
3. Hire a criteria professional to prepare preliminary criteria documents upon which to base facility needs.
4. Develop and adopt the statutory findings and notice for use of DB.
5. Develop criteria documents. The criteria professional, staff and other stakeholders, collaborate to provide a thorough set of procurement documents (the RFQ and RFP). The RFP must set forth the district's requirements for the project in detail.
6. Identify qualified proposers utilizing a questionnaire based on the DIR model ([www.dir.ca.gov/dlsr/pqdb.doc](http://www.dir.ca.gov/dlsr/pqdb.doc)). Review all district specific qualifying questions, selection criteria and weighting for consistency with statutory criteria prior to public release.
7. Short-list the most appropriate firms for an RFP, an interview, and final selection. Remain cognizant of the statutory requirements for best value selection pursuant to this delivery method.

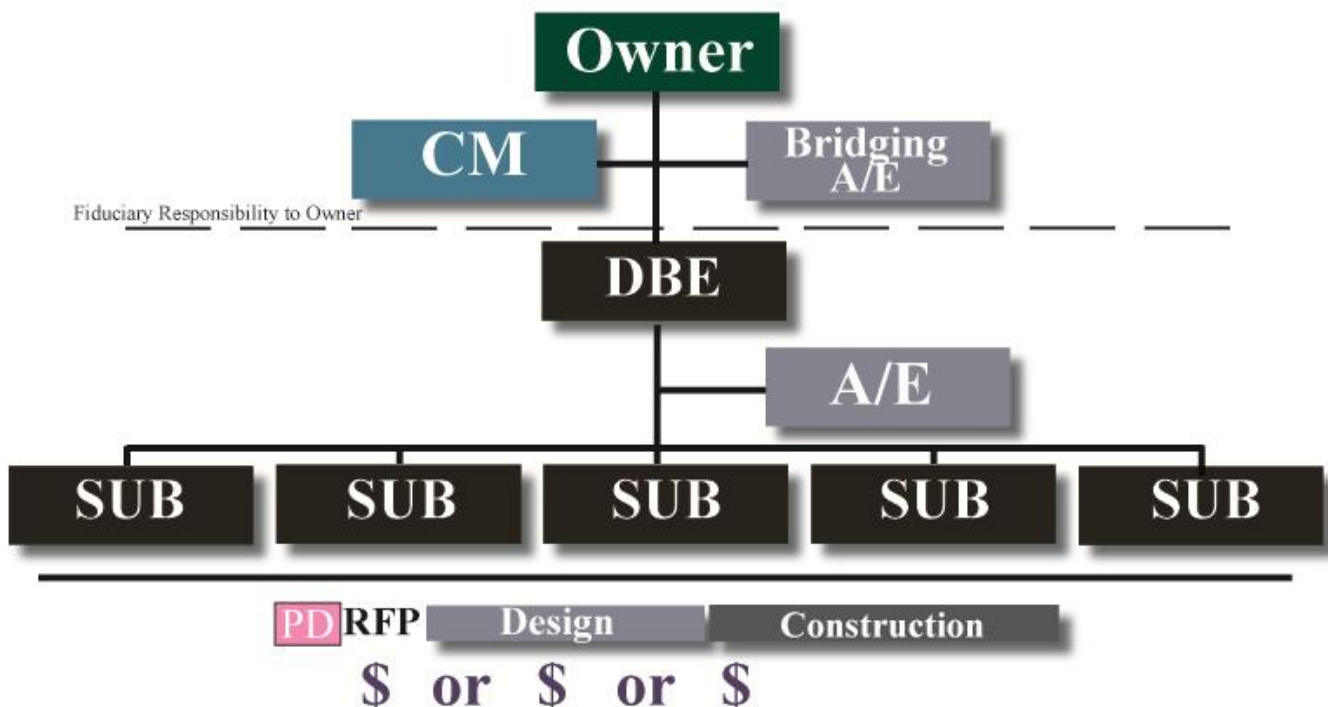
8. Use a knowledgeable judging panel to conduct a separate evaluation of cost and qualitative issues. The interview provides insight and knowledge of the proposer's team, design and construction plan, and abilities to complete the project not found in the written proposals.
9. Negotiate the services and fees that best fit your needs. Be prepared to discuss how the integration of management, design and construction services will affect district decision making and ensure the best value.
10. Reach agreement on the final contract terms for Board approval.
11. Welcome the DBE aboard and begin meetings with relevant staff to ensure everyone understands the DBE's role and responsibilities to the district.
12. Design pursuant to criteria.
13. Obtain all agency approvals.
14. Commence construction.

For more information, please review the DSA's Interpretations of Regulations:

- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)

The following chart is an example of the relationships of the parties in a DB scenario.

## Design-Build



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## Chapter 8 - DEVELOPER BUILT

### A. Description

Developer Built is a project delivery method whereby a school district contracts with a real estate developer to construct a new school on property initially owned by the developer. The property and improvements will subsequently become owned by the school district. Frequently, Developer Built schools are constructed as part of new residential developments, as part of a negotiated arrangement for meeting developer fee responsibilities. This can be a win-win situation for both the developer and the district. The school can be better sequenced with residential development and the developer can take advantage of hiring subcontractors already working for them in the area. Developer Built schools can also be built on urban infill properties, whether or not the school is part of a larger infill development project.

With Developer Built schools, there is generally a single point of responsibility to the district for both the design and construction of the school. A typical Developer Built project is negotiated as part of the school fees discussions. The district allows the developer to design and construct the new school facility according to a set of district standards. Plans and specifications must be approved by the DSA and are subject to Field Act Requirements.

In this type procurement, the developer decides how to contract for the design and construction. The school district may have a construction manager to assist them in the construction process. The developer may use a variety of delivery models: Design-Bid-Build, Design-Build, CM at-Risk, or Construction Management Multi-Prime.

### B. Enabling Legislation

Pursuant to Education Code Section 35160, commonly known as the "Permissive Education Code," schools are given broad authority to carry on activities or programs as long as they are not otherwise prohibited by statute or law. The primary limitation to a Developer Built school arises from expenditures that would be considered "Public Works," and thus subject to competitive bidding under Public Contract Code Section 20111. The two primary exceptions utilized for Developer Built schools are: 1) setting forth the Developer Built school design and criteria as a part of a property purchase agreement, or 2) undertaking a Lease-Leaseback arrangement.

The most common Developer Built scenario arises from mitigation conditions due to developer fees from a large development. As part of the agreement to pay developer fees, a mitigation agreement may include conditions to the sale of a property or a dedication in lieu of developer fees which may include a completed school. Since the construction of a school is part of a property sale or dedication, competitive bidding requirements under Public Contract Code Section 20111 would not apply.

### C. Relationship of the Parties

Under Developer Built, the district is responsible for the program, performance requirements, and final acceptance of the project. The developer is responsible for design and construction, usually carried out by third parties. The architect and engineers are responsible for normal professional design responsibilities.

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The relationships of the parties are as follows:

- District-Developer: The developer is the entity that holds the contract or development agreement with the district. This may be a corporation, partnership, joint venture, or other legal entity.
- Architect-Developer Option: The architect may be a consultant to the developer.
- Architect-District Option: The district may hire the architect to provide a design that conforms to the district's stated requirements and applicable codes. The architect's products are part of the contractor and district financial agreement.
- Contractor-Developer: The contractors are usually hired directly by the developer who may hold a general contractor's license. The developer may also hire a general contractor who will hire the specialty trade subcontractors.

**D.** Points for Consideration

1. The method can bring construction input into design.
2. It may facilitate value engineering.
3. The developer's monetary contribution may be greater than statutory fees.
4. Design usually blends with surrounding community.
5. The method could deliver the school earlier for district use.
6. The district has less responsibility and control of the project.

**E.** Simple Steps to Implement

A typical Developer Built school project will proceed as follows:

1. Determine whether Developer Built is the appropriate delivery method.
2. Negotiate appropriate terms with the real estate developer to address developer fee responsibilities, district input on design features, responsibilities for state agency approvals and other appropriate matters.
3. Develop criteria documents. The district, along with their construction manager, will provide a complete and thorough set of criteria documents to the developer. Education specifications, performance or prescriptive specifications, and district standards should also be developed, along with illustrative drawings or diagrams.
4. The design team develops the plans and specifications.
5. Obtain all required approvals from the DSA and other governing authorities.
6. The developer hires contractors to construct the project.
7. Commence construction.
8. Occupancy and title transfer occur per contract with developer.

For more information, please review the DSA's Interpretations of Regulations:

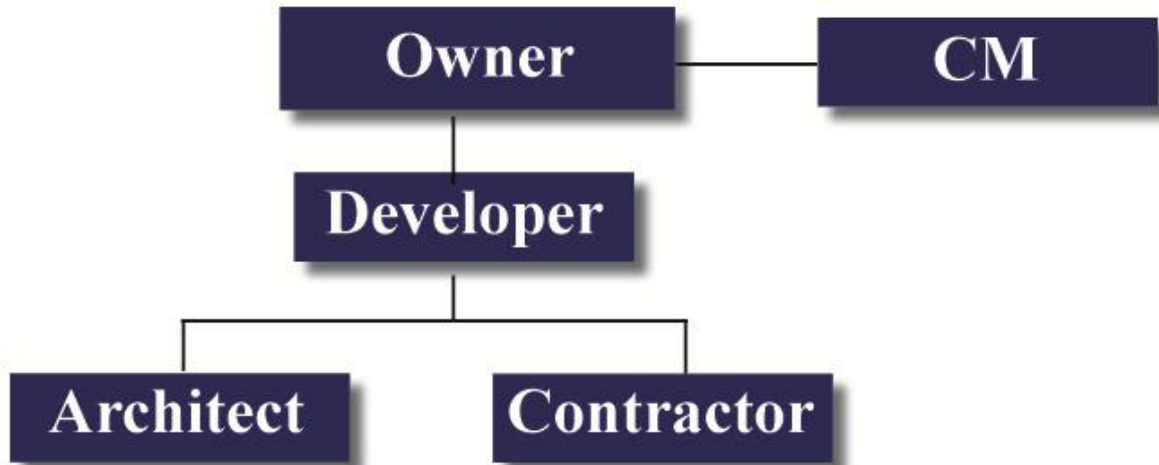
- [www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin](http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx#admin)



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The following chart is an example of the relationships of the parties in a Developer Built scenario.

## Developer Built



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## Chapter 9 – Other Procurement Issues

### Description

This chapter describes procurement methods that may be used on smaller school facility projects or that could be part of a delivery method described previously in this Handbook. Each procurement method will have a first paragraph describing the method and then a paragraph describing use of the method. School districts using any of these methods should always work with their legal counsel on the procurement contract.

This chapter will describe the following procurement methods:

- California Multiple Award Schedules
- Piggyback Contracts
- Project Labor Agreements
- Job Order Contracting
- DIR Registration of Public Works Contractors
- PWC Form Registration of Public Works Projects
- Prequalification of General and Certain Subcontractors

### California Multiple Award Schedules

The California Multiple Award Schedules (CMAS) are a way for school districts and community college districts to purchase goods, equipment, materials and some services quickly by placing a district purchase order against an existing contract awarded to a vendor by the CMAS system. Public Contract Codes 10290 and 12101.5 provide the authority for local agencies to use CMAS. CMAS contract awards to vendors are based on competitive pricing already conducted by a federal agency, but have included California specific terms and conditions to comply with California law. Speed of purchasing and a documented fair price are two of the advantages CMAS users like. Some of the things a district may purchase under CMAS include furniture for classrooms or offices, IT equipment, telecom equipment, construction materials (such as lumber or roofing), and services (such as training or workshop facilitation). Specifically not allowed under CMAS purchases are legal services, IT services, or any services requiring the license of a California registered architect, engineer, land surveyor, construction manager or any environmental services.

- District staff can find more detailed instructions at this website:  
[www.documents.dgs.ca.gov/pd/cmas/LocalGovtAgencyPacketMarch10.pdf](http://www.documents.dgs.ca.gov/pd/cmas/LocalGovtAgencyPacketMarch10.pdf)
- District staff can search for contracts for specific items at this website:  
[www.dgs.ca.gov/pd/programs/leveraged/cmas.aspx](http://www.dgs.ca.gov/pd/programs/leveraged/cmas.aspx).  
(Select "Find a CMAS Contract" and follow search directions)

Once a contract and products or services are located, ask the vendor for a copy of the CMAS contract to verify their currency and coverage. The district may make a best value selection if more than one vendor is located. Then write a district purchase order, including a complete statement of work with delivery dates, and any other requirements. Payments are made directly to vendors when due. Vendors report their sales to CMAS, and those who are not small businesses make a 1% administrative payment to CMAS each year.

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## Piggyback Contracts

Piggyback contracts are contracts that are used by multiple purchasers of the same product or personal property. The contract is structured by one purchaser and then is bid by that purchaser, with the inclusion of the option for other eligible purchasers to purchase at the same price if buying from the successful bidder. The bidding process and contract award process are pursuant to the Public Contract Code. Usually, piggyback contracts have limits on the duration for which the price will be available and when the other purchasers must exercise their option to purchase at that price. Occasionally, the contract could limit the number of units that will be sold pursuant to the piggyback contract. As always, the bid process and contract should be reviewed by the legal counsel for both the bidder and the other potential purchaser.

The contracts work best when the purchased product is standardized and there will be multiple purchasers using the exact same product with the same specifications. Piggyback contracts have been used to acquire relocatable classrooms. Because siting costs vary by each site, that work usually is not included in the piggyback contract.

## Project Labor Agreements\*

A Project Labor Agreement (PLA) is an agreement proposed by the trade unions, between the trade unions, a project owner, and all contractors on the project owner's projects. PLA means a pre-hire collective bargaining agreement that establishes terms and conditions of employment for a specific construction project or projects and is an agreement described in Section 158(f) of Title 29 of the United States Code (PCC § 2500). The PLA can be for a single project, all projects greater than a specified cost, or all public works projects to be completed within a specific time frame. The PLA usually contains all or most of the following provisions:

- No-strike clause
- Local hire focus
- Skilled labor force provision
- Maximum "core employees" provision
- Internship/apprenticeship programs for students
- All contractors'/subcontractors' employees:
  - Register with the appropriate trade union.
  - Are hired out through that union hall referral system.
  - Contribute to all of that trade union's health, fringe, pension apprenticeship, and other benefit plans.
  - Pay that trade union's representation fee.

PLAs are controversial because some studies indicate that the agreement will increase project costs, though other studies dispute that finding. Because non-union contractor employees have to go through the requirements specified above, this can reduce competition of non-union contractors and could consequently drive up bids. On the other hand, local skilled workforce and student learning provisions can address local needs and issues for elected officials. Because each project is different and each community is different, there will be situations when a PLA addresses community concerns expressed by the project owner. That decision is for the local elected officials allocating funds for the project. It is not a decision for the construction manager. The construction manager, however, should be prepared to provide neutral information regarding PLAs if requested by the project owner.

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### Job Order Contracting\*

A Job Order Contract (JOC) is a competitively bid, indefinite quantity contract for the performance of public works (construction services) based on specific charges or unit prices. JOCs generally list tasks with descriptions and the price to perform each task either as a percentage of a stated amount or as a stated amount.

Contracts cannot exceed \$5 million (\$10 million if extended) and each specific order cannot exceed \$1 million. The JOC procedure includes prequalification, local participation (optional), and the school district may utilize job order contracts only if the school district has entered into a PLA or agreement that will apply to all public works in excess of twenty-five thousand dollars (\$25,000) undertaken by the school district though at least December 31, 2021, regardless of what contracting procedure is used to award that work (PC § 20919.23). Because of the eligibility requirements, most school districts will not use JOCs for facility work.

*\*The PLA and JOC information in this section has been taken from a 2016 workshop presentation made by Orbach Huff Suarez & Henderson LLP.*

### Registration of Public Works Contractors

School districts cannot hire individuals or firms to perform a public works contract unless the individual or the firm working on the contract have registered with the Department of Industrial Relations (DIR) as a Public Works Contractor. This registration must be current at the time of commencing the public work and through the duration of employment on the public work project. The registration requirement applies to subcontractors as well. In order to ensure compliance, bid documents and prequalification documents should contain the registration requirement as part of the project award process.

Construction managers frequently provide compliance services for the school district. General or prime contractor(s) also can provide compliance services.

State School Facility Program project funding can be denied by the State Allocation Board if people requiring registration, but are unregistered, are used on the school project.

For more information on contractor registration requirements and PWC 100 project registration requirements, please go to:

- Department of Industrial Relations (DIR): [www.dir.ca.gov](http://www.dir.ca.gov)

### PWC 100 Registration of Public Works Projects

A PWC 100 form must be submitted to the Department of Industrial Relations no later than five days after commencement of a public works project. Failure to comply with a timely submittal can result in loss of state School Facility Program funding, which can be denied by the State Allocation Board if the PWC 100 is not filed within the five-day timeframe.

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### Prequalification of General, Prime and Specified Sub-Contractors

In order for a school district public works project to be eligible for state funding in the School Facility Program, the general contractor or prime contractor(s) and specified sub-contractors must be prequalified by the district for eligibility to be selected to work on the project, if the project has a cost of \$1 million or greater.

In general the prequalification requirement is limited to the general contractor or prime contractor(s) and the mechanical, electrical and plumbing prime or sub-contractors. However, Lease-Leaseback projects, regardless of funding sources, are required to have more subcontractors subject to prequalification prior to being selected.

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## Chapter 10 - SUMMARY

Districts want quality permanent structures, not Band-Aid approaches to facility needs. The escalating costs in the marketplace, coupled with inadequate state funding to meet these cost increases, place more pressure on public school districts to find more funds or seek alternative means of providing facility needs. The good news is that there are more choices available today than ever before that can save time and dollars, ensure good quality, and make life easier for districts when designing and building facilities. When it comes to considering the design and construction of a new or modernized facility, districts should consider utilizing all available delivery methods to achieve their objectives.

This Handbook has offered a description of the most popular project delivery methods used by school districts today. If you are uncertain about which method might be best for your next project, you may use the Project Delivery Selection Matrix at the end of this chapter to aid in your decision.

Remember, Construction Management is not a delivery method itself, but rather a range of professional services. It should be thought of as an extension of the district's staff and can be used with any project delivery method.

### Conclusion

There are several choices that a district must make concerning the type of contract and method of delivery to be used. In making these choices, each district needs to consider and attempt to maximize the advantages of the various delivery methods to best meet the goals of the district. Decision makers should also consider the ability of district staff to manage the differing contract responsibilities. No one contract, method, or combination is better than another for all situations.

In all cases a district should seek legal advice to ensure compliance with public codes, especially when using a new delivery method never before employed by the district.

### Using the Project Delivery Selection Matrix

The Project Delivery Selection Matrix provides a tool for comparing alternative delivery methods. The criteria listed are those which ACCM members identify as the ten most common objectives of K-12 and community college districts. Depending on the project, district board, and funding, each of these may have a greater importance. Other criteria may be added or substituted to fit local needs.

The most useful method of implementing this Matrix is to first assign a weight to each criterion. Any relative numeric scale will work. Multiple criteria can have the same weight. The objective is to provide a weight to compare alternative delivery methods. Each method is weighted on a 1 to 10 scale on how well it obtains the objective. For example, the district may determine that because of past change order issues, "Minimize Change Orders and Claims" is very important and weight it a 10. The district may also determine that encouraging a variety of local trade contractors is also important, but less important than minimizing change orders, and weight "Community and Political Issues" an 8. Finally, knowing what the initial cost is early may be determined to be as important as a range of local trade bids, and "Low Initial Cost" may also be assigned an 8.

If three delivery methods are available, Design-Bid-Build, Construction Management Multi-Prime and Design-Build, the evaluation could be as follows. Design-Bid-Build often results in change orders, so on this criteria it would score relatively low, say 2 on a scale of 10. Design-Bid-Build also gives the district little control over who the general contractor selects, so the ability to reach out to locals would be low. Say the district's judgment is that it can encourage general contractors to advertise local, but must select low-bid regardless and provide a 4 on a scale of 10. Finally, in evaluating low initial cost, readers know that DBB has an original fixed price and could weight this an 8; however, the cost can change significantly if change order are not controlled.

In comparing Construction Management Multi-Prime across criteria, a district could determine that because a project is managed by a qualifications based construction manager but with trade contracts on a low bid basis, Construction Management Multi-Prime would score this higher than Design-Bid-Build, and weight this a 5. Construction Management Multi-Prime does allow the district to target local trades and a district could weight this an 8. Finally, because multiple trade packages extend the time before total costs are known, a district could weight this a 5.

In evaluating Design-Build, readers would know that a single DBE should reduce change orders and claims and weight this an 8. Since the RFQ process provides flexibility in criteria, the interest in local trades could be met and assigned an 8. Finally, while a fixed cost will ultimately result, the total cost is not known until after contracting with the DBE for design and bid; this criteria could be weighted a 3.

	Weight	DBB		CM-MP		DB	
		Score	Total	Score	Total	Score	Total
Minimum Change Order	10	2	20	5	50	8	80
Commercial Issues	8	4	32	5	40	8	64
Low Initial Cost	8	8	64	8	64	3	24
			116		154		168

While this evaluation is just illustrative, it serves to reinforce two important points. First, the district has to seriously evaluate what is important in selecting a delivery method to meet its needs. Second, a construction manager can provide indispensable expertise in comparing delivery methods early in the process.

In order to avoid the appearance of favoritism, this sample indicates only a hypothetical ranking of the delivery methods. Other delivery methods would, of course, score differently according to the judgment of the user. The highest ranking delivery methods should be considered as best meeting the needs of the project.

# PROJECT DELIVERY SELECTION MATRIX

Project:                     SAMPLE                    

CRITERIA		DELIVERY METHOD OPTIONS											
<i>Criteria</i>	<i>Criteria Weight</i>	<i>DBB</i>		<i>CM at-Risk</i>		<i>CM-MP</i>		<i>DB</i>		<i>LLB</i>		<i>Other</i>	
<i>Schedule flexibility</i>													
<i>Owner design control</i>													
<i>Awarding on best value</i>													
<i>Low initial cost</i>													
<i>Promoting teamwork</i>													
<i>Less owner management</i>													
<i>Establishing early final price</i>													
<i>Minimize COs and claims</i>													
<i>Community and political issues</i>													
<i>Early/timely completion</i>													
<i>Totals</i>													

Objective: Rank each delivery method relative to criteria on a scale from 1 (low) to 10 (high).

Note: Keep in mind that this is only meant to be a guide to help quantify the selection of your delivery method. It may or may not determine your final decision, especially if two or more deliver methods are closely ranked.



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## GLOSSARY OF TERMS

### Best Value

An evaluation process in which evaluation criteria is based upon quality, cost adequacy, effectiveness and timeliness for the best overall value and interest of the public.

### Bid Documents

The documents issued that describe the proposed work and contract terms. Bid documents typically include: drawings, specifications, contract forms, general and supplementary general conditions, proposal or bid forms, and other information.

### COs

Change Orders

### Competitive Bidding

A process in which the selection is based upon the lowest cost submitted by responsible and responsive bidders.

### Constructability

The ease with which a project can be built based upon the clarity, consistency, and completeness of the contract documents for bidding, administration, and interpretation to achieve overall project objectives.

### Construction Manager

A professional with a general contractor, engineering, or architectural license and the experience of professional management skills to be applied to the planning, design, and construction phases. During the construction phase, the construction manager will manage construction activities, create a construction schedule, and acts as the individual's general contractor managing and controlling time, scope, cost, and quality. Costs for construction managers are generally part of the hard costs of a project.

### Criteria Architect

The architect responsible for the design-build package and program; not the architect that is part of the design-build team, who is the Architect of Record (AOR).

### Delivery Method

A method that dictates how the design and construction of a project will be completed and what contractual relationships the parties have in the process.

### Design Risk

The risk and cost associated with errors, omissions, or conflicts in plans or specifications prepared by the designers of a project. In many delivery systems, the owner bears the design risk on behalf of the builder and may have a basis to recover costs from designers. In some alternate delivery systems, the builders agree to take on some or all design risk.

### Department of Industrial Relations

The Department of Industrial Relations (DIR) was established in 1927. Its mission is to improve working conditions for California's wage earners and to advance opportunities for profitable employment in California. DIR administers and enforces laws governing wages, hours and breaks, overtime, retaliation, workplace safety and health, apprenticeship training programs, and medical care and other benefits for injured workers. DIR also publishes materials and holds workshops and seminars to promote healthy employment relations, conducts research to improve its programs, and coordinates with other agencies to target egregious violators of labor laws and tax laws in the underground economy ([www.dir.ca.gov](http://www.dir.ca.gov)).

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## GLOSSARY OF TERMS

### Division of the State Architect

The Division of the State Architect (DSA) provides design and construction oversight for K–12 schools, community colleges, and various other state-owned and leased facilities. The division also develops accessibility, structural safety, and historical building codes and standards utilized in various public and private buildings throughout the state of California.

### General Conditions

A section of general clauses in the contract specifications that establish how the project is to be administered. Included are obligations such as providing temporary work, insurance, field offices, etc.

### Guaranteed Maximum Price

The Guaranteed Maximum Price (GMP) is the price set as the guaranteed amount an owner will pay to a builder for the agreed upon scope, except for the cost of specifically excluded items such as owner preferences, owner initiated improvements, or requirements of code enforcement agencies having jurisdiction.

### Holds the Construction Contracts

Entering into one or many contracts for all of the construction or the many parts of the construction. The party who signs the contract with a construction firm is said to “hold” the contract. In different delivery systems, the owner can hold one contract or many.

### Joint Ventures

An arrangement where two or more entities, usually with differing areas of expertise, join together into a single entity to provide a service or product. For example, a contractor may join with an architect to deliver a Design-Build project.

### Life-Cycle Cost

Life-cycle costs include all costs incidental to the planning, design, construction, operations, maintenance and demolition of a facility or system for a given life expectancy, all in terms of present value.

### Low-Bid

Also known as “competitive bidding” or “hard bidding.” This is the formal selection process as outlined in the Public Contract Code where a public entity selects a contractor or vendor on the basis of the lowest responsible and responsive bid received. Contrasting selection methods include the “best value” and the “qualifications based” selection methods.

### Lump-Sum

A pricing method where the scope and definition of the project, product, or service is well defined, thereby allowing for a single fixed price. This pricing method is in contrast with “unit pricing” and other percentage based methods where the final price adjusts based on pre-determined factors.

### Personal Property

As used in the public works delivery process it is meant to contrast with a “Public Work” and generally includes equipment, materials, or supplies which, by their nature, are not permanently affixed to a site.

### Program Management (sometimes called Bond Program Management)

The management of a family of projects or projects linked by a common set of objectives or geography. Program Management may include creating the sources of funding, the determination of delivery strategies, and the development of processes and tools to manage the multiple projects.

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## GLOSSARY OF TERMS

### Project Manager

A professional who manages a project (or projects) with management skills applied to the planning, design, and construction phases. During the construction phase, the project manager reviews construction activities and acts as the individual representative monitoring time, scope, cost, and quality. Costs for the project manager are generally part of the soft costs of a project.

### Project Management

The application of knowledge, skill, and tools to the initiation, planning, execution and close-out of project scope, cost, time, quality, risk, human resources, procurement, and communication.

### Punch List

A list made near the completion of the construction work indicating items of work that remain unfinished, do not meet quality or quantity requirements as specified, or are yet to be performed by the contractor prior to completing the terms of the contract.

### Request for Information

A Request for Investment (RFI) is an instrument used typically by the Prime Contractor to obtain information from the design team or owner to clarify a contradiction or ambiguity in the construction documents. It can be generated by anyone on the project team.

### Risk

As used in the construction industry, it is a possibility of a loss of profit. Usually associated when a contractor provides a fixed or not-to-exceed price.

### Short Interval

An abbreviated period of time. It is used primarily in conjunction with scheduling, such as a two or three week look-ahead schedule. It provides a more detailed picture of the construction activities in the immediate future.

### Single Guaranteed Bonded Price

A price arrived at and made the total price of a construction contract with an owner, which is made up of several bonded or un-bonded prices. In CM at-Risk, the CM delivers a single guaranteed bonded price which may be made up partially of prices from contracts previously awarded by an owner.

### Trade and/or General Contractors

Construction contractors who specialize in providing and/or installing specific elements of the overall construction requirements of a complete project.

### Trade Package

A defined scope of work which will be competed and awarded to a specific specialty construction firm. A trade package might be for only electrical work, only painting work, or it may be for a collection of work such as wood framing, metal door frames, and building paper, all together in one package.

### Value Engineering

A specialized cost control technique, which utilizes a systematic and creative analysis of the functions of a project or operation to determine how best to achieve the necessary function, performance, and reliability at the minimum life-cycle cost.



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