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PREFACE

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 the Association of California Construction Managers are leaders in the field of managing educational facility construction. This ACCM Handbook explains Construction Management services and then goes on to outline the range of project delivery alternatives.

The ACCM Handbook provides an independent resource for Districts trying to choose from among the diverse project delivery services that are available. The need for this Handbook stems from ACCM’s recognition that there is no single project delivery method that meets all Districts’ needs. Each of the contributing editors likely has a preferred delivery method. However, the ACCM members recognize that the appropriate delivery method for a particular project in a particular District 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 with particular district needs.

I wish to extend my appreciation to my colleagues on the ACCM Board of Directors for their support and encouragement on this project. I 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:

Jack Moore – PHASEOne Construction
Paul Bonaccorsi – WLC Construction Services Inc.;
Richard Cowan – Clark & Sullivan;
Robert Hartung – Alternative Delivery Solutions, LLC;
Dana LeSher – Harris & Associates;
Tony Lief – FL Construction Management;
Ed Mierau – Neff Construction;
Terry Street – Roebbelen Contracting;
Terry Tao – Atkinson-Andelson-Loya-Ruud & Romo.

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 Districts should contact:

Division of the State Architect, Department of General Services, David Thorman, State Architect: www.dsa.dgs.ca.gov

School Facilities Planning Division, California Department of Education, Kathleen Moore, Division Director: http://www.cde.ca.gov/ls/fa
School Property Evaluation and Clean-Up Division, Department of Toxic Substances Control, Hamid Saebfar, Division Chief: www.dtsc.ca.gov/Schools

Office of Public School Construction, Luisa Park, Executive Officer: www.opsc.dgs.ca.gov

Community College Districts should contact: College Finance and Facilities Planning Division, California Community Colleges Chancellor’s Office, Fredrick E. Harris, Assistant Vice Chancellor: http://www.cccco.edu/divisions/cffp/facilities/facilities.htm

Jack Moore, PHASEOne Group, Torrance, California
President, Association of California Construction Managers
September 25, 2006
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 or college district to analyze the resources and capabilities 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 constrain potential partners, (eg. Design-Bid-Build; Piggyback Contracts; Developer Built Projects), retention of a Construction Manager to act as the District’s agent can result in pre-construction collaboration among the owner, 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 considerations
3. Complexity and Size of Project
4. Level of District control desired
5. Type and size of contractors that you want to attract
6. Budget constraints
7. Predominant trade practice in region
8. Openness to alternative methods
9. Appropriate community and business participation
10. Level of acceptable legal and financial risk

The ACCM Project Delivery Handbook is intended to provide an overview of the various project delivery methods available to Districts and their Construction Managers. The Handbook begins with a description of services that Construction Managers provide and ends with a tool that Districts may use to select an appropriate delivery method for their projects.
Chapter 1 - WHAT IS CONSTRUCTION MANAGEMENT?

Construction Management 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 Districts. These projects can be highly complex or simple in scope. A key distinction between Construction Management and other contractor services is that because the Construction Manager provides a professional service, a Construction Manager need not be selected on a low bid basis but may be selected on a best value basis as is an Architect or other professional.

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 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.

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.

There are a range of professional services that a Construction Manager can provide to assist in the facility construction process. The following is a comprehensive list of services available at each of the five principal stages of facility construction ranging from Planning 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 standards.
- Site selection analysis and acquisition.
- Develop the program/project management plan to document program/project characteristics and performance requirements.
- 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.
- Conceptual estimating services.
- Assist in procurement of consulting services, including developing RFP/RFQ, interview process, and contract negotiations.
- Develop phasing plans.
- Develop bidding strategies.
- Prepare front end specification documents.
• Create websites for reporting to 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 biddability and constructability reviews.
• Develop contract document requirements for safety program.
• Review design 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
• Bid marketing services and creation of pre-qualification procedures.
• Perform community and contractor outreach.
• Implement contract award process.
• Conduct pre-bid conferences.
• 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.
• 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.
• Monitor the project site to ensure that the contractor provides a safe environment.
• Coordinate punch list activities.
• Coordinate quality management – (inspection services and quality assurance).
• Coordinate outside agency activities and interactions with the construction process.
• Implement and manage labor compliance program.
• Perform cash flow projection report.
• Manage occupancy of new school.

Post Construction Stage
• Manage receipt and compliance with closeout process.
• Manage commissioning and start up.
SELECTING A CONSTRUCTION MANAGER

We recommend that the District prepare a Request for Qualifications or Request for Proposals (RFQ/RFP), advertise and/or send an RFQ/RFP to qualified firms. ACCM can provide a model RFQ/RFP at: http://www.accm.com. We also suggest that a Construction Manager be hired early in the planning stages for the best results of this delivery method. This can be done at the same time as the District is looking for an Architect.

The District should determine whether or not its staff can adequately manage a new school project. There needs to be one point of contact for the District. The contact person should be a District staff member.

A good resource for contract reviews is the AIA contract for Construction Managers, AIA B801/CMa and AIA B141/CMa. The Construction Manager and Architect are considered a professional service for the Client/District, not contractors, and clarity of the services is important from the beginning.

For the best relationship and results, both the Architect and the Construction Manager should be hired at the contract negotiation phase or just before the bidding, not after DSA approval. It is difficult to form a relationship in a month or two for a construction period of one year to three years. Limits on entering construction contracts after DSA approval do not apply to professional service contracts.

Once a Construction Manager is hired, there needs to be:

a. Clear definition of the scope of work for all District consultants.
b. Clear definition and agreement of the TOTAL project budget.
c. Clear definition of the master project and construction schedules.
d. Single point of contact for project decisions and District coordination for the Preconstruction and Construction Phases.
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. Construction fees may be either hourly not-to-exceed, fixed negotiated price or a percentage of bids. The Agency Construction Manager offers advice, uncolored by 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(s), delivered in any manner; e.g., design-bid-build, Construction Management-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.

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 Facilities Program. 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 fee-based 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. 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 the construction contracts and the primary costs 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 rework. The term agency implies a delegation of function to the Construction Manager by the District. The necessity for openness and candor between the Construction Manager and District is paramount. Agency CM 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.

A Agency Construction Management firm can manage a variety of delivery methods. During construction, the Construction Manager performs oversight services similar to those of a general contractor, albeit without contractual 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 CM is often used to represent the
District’s interests in 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 CM. 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 CM fees.

Trade and/or the general 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.

Please note the following chart as an example of the relationships of the parties in a Construction Management scenario.

**Agency CM**

**D. Advantages of Agency Construction Management**
1. Professional Service selection process available without regard to price.
2. Suitable for any delivery method.
3. CM works directly for District as a knowledgeable advocate for District’s interests.
4. CM acts as Agent of District – no financial conflicts of interest.
5. CM helps District maximize control over project providing expertise for cost/time/quality benefits.
6. The service is commonly understood.
7. Requires fewer direct staff resources than other methods.
8. Provides construction expertise during design.
9. Facilitates preconstruction services.

**E. Disadvantages of Agency Construction Management**
1. District holds all contracts and retains all payment and other contractual liabilities.
2. Potential for duplication of efforts between staff, other professionals and CM as agent.

**F. 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 Request for Qualifications or Request for Proposals to allow you to select the most appropriate firms for an interview and final selection. (ACCM has developed a model RFQ/RFP available at 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 which and how many 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 CM aboard and begin meetings with relevant staff to ensure everyone understands the CM’s role and responsibilities to the District.
Chapter 3 - TRADITIONAL DESIGN-BID-BUILD

A. Description

Design-Bid-Build is the traditional project delivery approach that was used for most of
the 20th century to complete projects in the public sector. The Design-Bid-Build model
segregates design and construction responsibilities by awarding them to an independent private
Architectural Firm and a separate private contractor. By doing so, Design-Bid-Build separates
the delivery process into three direct phases: 1) Design, 2) Bid, and 3) Construction.

During the initial design phase, a public agency awards a design contract to an Architect
using a quality-based approach, awarding the procurement to the firm providing the best
experience and quality. The Architect is responsible for completing a final project design and
providing detailed construction drawings, specifications and supporting documents.

In the bid phase, the owner would use the documentation prepared by the Architect to
assemble construction bid documents. 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 construction
phase, with the owner retaining responsibility for monitoring the contractor's performance.

Design-Bid-Build is most frequently done using a lump sum bid contract, but guaranteed
maximum price is sometimes used. One pitfall to look for is that sometimes contractors will
intentionally bid low in order to win the project and then hope to make up the loss in profits
through change orders. The Construction Management profession has grown in response to gaps
in services caused by the separation of delivery processes and the emphasis on low bid rather than
service quality.

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 achieve the following objectives:

a. To clarify the law with respect to competitive bidding requirements.
b. To ensure full compliance with competitive bidding statutes as a means of protecting
   the public from misuse of public funds.
c. To provide all qualified bidders with a fair opportunity to enter the bidding process,
   thereby stimulating competition in a manner conducive to sound fiscal practices.
d. To eliminate favoritism, fraud, and corruption in the awarding of public contracts.

C. Relationship of the Parties

First and foremost, the owner wants their project constructed on schedule and at the
original Architect’s estimate and the Owner’s budget. A public entity, must answer to a higher
board and to the public themselves. Accountability for project delivery will be a critical element
of their future success. The owner is also 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, is an
important owner objective. The owner would also like to see design and construction innovation
that results in reduced construction cost, shortened construction schedule, or both.

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 explained the rules
for bidding the work, how he will be paid for the work he performs, the more effectively he’ll understand and price the risks. This will directly influence what the owner pays for their project. Because the owner-contractor relationship is largely influenced by statutory low bid requirements, the potential for conflicts is significant.

While the design Architect also wants to make a profit, he 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 resulting 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 align with the contractor having the lowest responsive bid. To the extent that construction innovation can lead to cost savings and a happier owner/client, the design Architect should be motivated to foster open communications and efficient review processes that allow these ideas to be brought forward.

Under design-bid-build, the project's design and construction are contracted separately. The Owner must advertise for an Architect/Engineering firm to design the project. Professional design services for public projects are selected on the basis of qualifications by the owner with a negotiated fee. 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 owns 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.

**Design/Bid/Build (Traditional)**

![Diagram of Design/Bid/Build (Traditional)]

**D. Advantages of Design-Bid-Build**

1. It is the familiar and established way of delivering a project.
2. Design documents must be thorough and complete to enable contractor bidding.
3. Public Contract Code and legal challenges have set accepted standards.
4. The A/E of record works for the owner and represents the owner.
5. It is suitable for competitive bidding with lowest initial price.

E. Disadvantages of Design-Bid-Build
1. There is no early builder involvement.
2. Conflicts can arise between Architect and builder after design is complete and builder is selected.
3. Bids over budget present the most difficulty in reducing costs.
4. Loss of flexibility due to single bid format.

F. Simple Steps to Implement
1. If there is not a Construction Manager, the Owner must implement.
2. Select the Architect.
3. Adopt a project plan, construction schedule with your Architect.
4. Manage the design process with clear expectations for integration of the construction process.
5. 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.
6. Obtain DSA approval of the design before bid.
7. Obtain all off-site utility approvals before the bid.
8. Put the completed design plans and specifications out to bid.
9. Open the bids pursuant to statutory framework and award the contract to the lowest responsible bidder.
10. Commence construction.
Chapter 4 - MULTI-PRIME

A. Description

The traditional Multi-Prime delivery method is bid out similar to the design-bid-build method, but in individual trade bid packages for trade contractors, not general contractors. Rather than subcontractors bid and selected by the general contractor, each package of trades is bid by the District. This delivery method significantly changes the trade contractors’ relationship with the District by working 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 bid pursuant to traditional 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 as on-site Construction Manager during construction by providing scheduling, supervision, change order negotiations, and other activities required to build the project. This method allows the District to retain the management services by qualifications based, 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 School District in a Multi-Prime delivery method assumes many of the risks of a general contractor. The School 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 typically secures a separate performance bond. Many risks that would have been born by the general contractor are thereby born by the trade contractor.

B. Enabling Legislation

In 1994, Construction Management was implemented by the State Allocation Board 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 scope, budget, and estimated time frames for on and off-site agency approvals, as well as the construction period and trade contractors breakdown 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 Multi-Prime delivery method. Since the Construction Manager provides the general contractor’s role in managing the multiple trades, it is the Construction Managers’ responsibility for the 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).

If communication is maintained per the bid documents the relationship will grow and the project will be a success. It is vital to have the Team meet early and an effective Multi-Prime Construction Manager maintains trust and cooperation among team members. When well implemented, the District receives both professional advice and cost control inherent in the low bid process.
D. Advantages of Multi-Prime
1. More control by the District of construction phase schedule.
2. Trade contracts are procured through competitive lowest responsible bidders.
3. Trade contractor bidding process is familiar to the District.
4. Potential to re-bid over-budget trade package without project delay.
5. District has more flexibility of bidding and scheduling which allows for multiple phases.
6. Construction Manager provides construction expertise to assist in the entire design, planning, permitting and construction process.
7. Avoids general contractor mark up.
8. Multiple packages provide greater opportunity for participation by local trade contractors.

E. Disadvantages of Multi-Prime
1. More contracts for District to manage.
2. Possibility of overlaps or gaps in the scopes of work.
3. District accepts more risk by hiring multiple trade contracts directly.
4. Contracts with separate trades make scheduling more difficult to control.
5. Total price is not known until all bids are awarded.
6. Lack of single guaranteed bonded price for total project.
7. Each contract package subject to litigation.

F. Simple Steps to Implement
1. Determine whether Multi-Prime CM is the appropriate delivery method for your project.
2. Develop preliminary CM 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 Request for Qualifications or Request for Proposals to allow you to select the most appropriate firms for an interview and final selection. (ACCM has developed a model RFQ/RFP available at ACCM.com)
4. Reach agreement on the final contract terms for Board approval.
5. Negotiate an appropriate cost for the CM’s general conditions and appropriate fee.
6. Welcome the CM aboard and begin meetings with relevant staff to ensure everyone understands the CM’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 CM 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. Commence construction.

**CM Multi-Prime**
Chapter 5 - CONSTRUCTION MANAGEMENT AT-RISK

A. Description

Construction Management At-Risk (CMAR) 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 changes to a general contractor relationship that puts a fixed price on the project. The CM is at risk for constructing the project at the contract price. This method is similar to the 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.

The use of a Construction Manager At-Risk similar to the Multi-Prime Construction Manager is optimized if they are available at the earliest stages of a project. The Construction Manager At-Risk process can eliminate the missed expectations that can take place in the design-bid-build process where the low bid general contractor is unaware of conversations that might not have been incorporated in the construction documents. The CMAR 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 differing interpretations that may affect the level of risk and contract administration.

B. Enabling Legislation

Similar to Multi-Prime as addressed in the preceding section, Construction Management 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 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.

Some school districts have entered into Lease-Leaseback agreements pursuant to Education Code Section 17406 (as addressed in the Lease-Leaseback section) in order to undertake a true “at risk” situation where all risk is placed with the Construction Management entity.

C. Relationship of the Parties

In the CMAR 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 CMAR to administer through the completion of the contract. The trade contractors retain responsibility of the means, method and techniques of construction. In the CMAR process, the Construction Manager clearly dictates the sequence and schedule of the work within the required project duration. The Construction Manager also depicts 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 CMAR 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 CMAR to the District. In many situations, the CMAR acts like an extension of the District staff.

The CMAR 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 Construction Management At-Risk delivery method the Construction Manager ends with a fixed price contract. Profit is based less on professional advice and more on controlling costs to the CMAR (risk).

**CM-at-Risk**

![CM-at-Risk diagram]

### D. Advantages of Construction Management At-Risk

1. Construction Manager may be selected based on qualifications and personnel and later converted to “at-risk” position.
2. Fixed price based on complete design documents.
3. Trade contracts are procured through competitive lowest responsible bidders.
4. Trade contractor bidding process is familiar to the District.
5. Potential to rebid over-budget trade package.
6. District has more flexibility of bidding and scheduling which allows for multiple phases.
7. Construction Manager provides construction expertise to assist in the entire planning, permitting, design and construction process.
8. Multiple packages provide greater opportunity for participation of local trade contractors.
E. Disadvantages of Construction Management At-Risk
1. Increased fees for assumption of risk.
2. Insurance and bonding responsibilities less certain.
3. No common standards for CM at Risk methodology.
4. Construction Manager relationship with District changes during process.
5. Potential conflict if CM also performs work with contractors on other projects.
6. Potential decrease in competition for trade contractors because of added bidding and reporting requirements.
7. More contracts for District to award.
8. Possibility of overlaps or gaps in the scopes of work.
9. Not all Construction Managers bond total project.

F. Simple Steps to Implement
1. Determine whether CM at-Risk is the appropriate delivery method for your project.
2. Develop preliminary CM 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 Request for Qualifications or Request for Proposals to allow you to select the most appropriate firms for an interview and final selection. (ACCM has developed a model RFQ/RFP available at ACCM.com)
4. Reach agreement on the final contract terms for Board approval.
5. Negotiate an appropriate cost for the CM’s general conditions and appropriate fee.
6. Welcome the CM aboard and begin meetings with relevant staff to ensure everyone understands the CM’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 CM 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. Negotiate a guaranteed maximum price including general conditions and fee.
11. Assign the trade contracts to the Construction Manager.
12. Commence construction.
A. Description

Design-Build is a unique project delivery method whereby there is a single contract with one entity to design and construct the project. It is recently re-emerging nationally and in California as an alternative to traditional design-bid-build and other delivery methods.

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

Design-Build is an integrated process. The Architect/Engineer & 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 lead. Regardless of the form the DBE takes, there is only one contract with the District and DBE.

Design-Build may be used on complicated or simple projects. The type of control a District has over the project varies from project to project with Design-Build and can be dictated by the terms of the RFP. Please note that after the contract is signed the District has little control unless it is specifically addressed in the contract. Design-Build 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. Accordingly, Design-Build competitions have emerged in the public sector as a means of achieving the benefits of Design-Build while adhering to the need to award construction projects on a competitive basis.

AB 1402 (Simitian) (Ed Code 17250, et seq.) – This landmark legislation took more than three long years for proponents and opponents to finally reach compromise. It was passed by the legislature in October, 2001, signed by Gov. Davis and became Law January 1, 2002. The act will remain in effect only until January 1, 2007. Proposition 1D, the November 2006 school bond initiative, will extend the date to January 1, 2010 if approved by the voters.

The legislation has rather broad K-12 authority, may be used on all projects of $10,000,000 or more, and contains certain requirements a school District must follow. The specific requirements and steps to implement a Design-Build project may be found in the publication, “AB 1402 Design-Build Projects Guidelines, 2002 Edition,” the Design-Build manual provided by the California Department of Education after the passing of AB 1402. It is available online at: http://www.cde.ca.gov/re/pn/fd/documents/dbpguidelines.pdf

AB 1000 (Simitian) (Ed Code 81700, et seq.) – This bill followed closely on the heels of AB 1402 and contains nearly identical language. It was passed by the legislature in September, 2002, signed by Gov. Davis and became law January 1, 2003. The act will remain in effect only until January 1, 2008. Proposition 1D, the November 2006 school bond initiative, will extend the date to January 1, 2011 if approved by the voters.

The legislation has somewhat limiting Community College Design-Build authority, in that it may be used for any qualifying project in three specific community college Districts (Los Angeles, San Jose/Evergreen, and San Mateo) and five other projects at large, to be selected by the Chancellor of the California Community Colleges. It may be used on projects of $10,000,000 or more, and contains certain requirements a community college District must follow. The specific requirements and steps to implement a Design-Build project may be found in the publication, “Community College Design-Build Guidelines”, the Design-Build manual provided
C. **Relationship of the Parties**

Simply stated, under Design-Build, the District is responsible for the program, performance requirements, and financing of the project.

The Design-Build Entity is responsible for both design and construction. The Architect is responsible for normal professional design responsibilities and is a member of the Design-Build Entity. The relationships of the parties in Design-Build procurement may be viewed on two levels, practical and contractual. Practical relationships have to do with qualifying the Design-Build 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 preclude the following reasonable descriptions. Because the success of working relationships in a Design-Build project depends on an accurate understanding of roles and responsibilities, a detailed description follows.

**Design-Build Entity:** The Design-Build Entity 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 Design-Build Entity may be thought of as the Design-Build team, including the general contractor, Architect, sub consultants and subcontractors.

Unless the Architect is the lead member, or joint venture partner of the Design-Build Entity, the Architect contracts with the Design-Build Entity. The Architect may be in the lead position or a partner, but is usually a sub-consultant to the general contractor of the Design-Build Entity. This does not prevent the Architect from interacting with the District.

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 Design-Build 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.
Construction Manager: A District may elect to hire a CM with Design-Build expertise or District’s representative as an extension of their staff. This entity 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.

D. Advantages of Design Build
1. Teamwork is promoted because General contractor and Architect are on the same team.
2. Earlier knowledge of construction costs guaranteed during design.
3. Design risk shifted to the DBE.
4. Single point of responsibility for District with fewer changes.
5. Only one RFQ and/or RFP required for design and construction.
6. Only one contract for both design and construction.
7. DBE may be selected on statutory best value basis rather than traditional low bid.
8. More District involvement earlier in process with less involvement needed after design.
9. Potential for faster delivery system.

E. Disadvantages of Design Build
1. New learning curve for Districts and agencies.
2. Districts pushed for earlier decisions.
3. Different process in the front end of project.
4. New and unique statutory requirements for selecting Design-Build Entity and subcontractors.
5. Insurance and bonding details are less understood.
6. Statutorily limited to projects with value greater than $10 million and regionally counted for Community College Districts.
7. Potential for less control by District of design and design details.
8. Political resistance among those unfamiliar with method.

F. Simple Steps to Implement
1. Determine whether Design-Build 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. For K-12 Districts this means project value along with new public procedures. For Community Colleges this will also mean location in one of the three eligible Districts or Chancellor selection as one of the projects at large.
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 Design Build.
5. Develop Criteria Documents. The criteria professional, staff and other stakeholders, collaborate to provide a thorough set of procurement documents (the RFQ & RFP). The RFP must set forth the District’s requirements for the project in detail.
6. Identify qualified proposals utilizing the questionnaire provided by the Department of Industrial Relations (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. Commence construction.
Chapter 7 - LEASE-LEASEBACK

A. Description

The Lease-Leaseback delivery method is to select an organization, commonly referred to as the Developer-Contractor, to develop a new building or improve buildings on property the District owns. A Construction Management firm may serve as a Developer-Contractor. The mechanism is for the Developer-Contractor to simultaneously execute a Site Lease of the property giving it the right to develop the project and a Facilities Lease 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 allow different approaches: for financing, if any; for selection of the Developer-Contractor; for design responsibility; for lease terms; and for method of selecting trade contractors. This flexibility is a primary attraction of Lease-Leaseback.

Preconstruction work by of the Developer-Contractor up to the time of signing of leases is sometimes conducted under a Preliminary Services Agreement, although some attorneys draft leases that are signed immediately and then amended as design and pricing are developed. Some attorneys draft leases providing for pre-construction services, even design responsibility, with language that calls for an amendment to give approval for construction to proceed including setting the date of completion and the Guaranteed Maximum Price.

B. Enabling Legislation

The statutes, Ed Code 17406 and 81335 for K-12, authorizing this approach are very broad and therefore many variations and different approaches to Lease-Leaseback have been refined. Education Code Section 81335 for Community Colleges is similar to Education Code Section 17406 except for a slight, but significant, language variation. The omitted language “without advertising for bids” is the operative language for Lease-Leaseback under Education Code Section 17406. Pursuant to validation actions taken on behalf of Community Colleges, some courts have held that the language was simply an omission during preparation of the legislation. However, legal counsel should be consulted if Community College is planning on using the Lease-Leaseback delivery method. Recent legislative efforts have proposed to limit the applicability of Lease-Leaseback and to provide detailed parameters for its usage. Those bills have been vetoed. As with any construction contract, Districts should be certain to consult an attorney experienced with alternative delivery methods to ensure that any proposed Lease-Leaseback project meets current legal standards.

C. Relationship of the Parties

Parties involved in Lease-Leaseback include the District and the Developer-contractor. The District’s team will include legal counsel, the design team, testing & inspection and potentially an agency CM representing the District’s interest. The Developer-Contractor team includes legal counsel, funding sources, a general contractor and trade contractors. In many cases, the General contractor acts as the Developer-contractor.

Legal counsel. Perhaps more than any other delivery method, close coordination with a law firm is critical. Not only because of recent political sensitivities, but because this delivery method requires at least two additional contracts: the lease and the leaseback. In addition, these arrangements also require decisions about the extent or terms of any financing required. 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 terms of the lease.

Developer Contractor. Most Lease-Leaseback teams are selected based on qualifications with an agreed upon process to arrive at a Guaranteed Maximum Price. Some Districts also
consider the lowest cost of the financing, and still others have prequalified a short list of Developer-Contractor teams, and then selected one based on a competition of total project cost.

The legal structure of the Developer-Contractor can vary. Some Districts have retained firms who develop private projects as the Developer-Contractor. 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 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 Developer-Contractor.

Districts can ask the Developer-Contractor to take the risk of completeness and accuracy of plans. These arrangements are usually met by the Developer-Contractor identifying the risks it accepts and including a contingency or allowance in the Guaranteed Maximum Price for the project.

Architect. The relationship between the Developer-Contractor and the Architect also is important. The Developer-Contractor (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 Lease-Leaseback arrangements, the District retains its traditional relationship with its Architect and the District and the Architect controls the design of the improvements. Many Lease-Leaseback agreements call for the Developer-Contractor to monitor designs as they are developed to ensure attainment of budget. Almost all Lease-Leaseback arrangements call for the Developer-Contractor to offer cost saving ideas. Some Lease-Leaseback arrangements call for the Developer to take the responsibility to design the improvements.

**D. Advantages of Lease-Leaseback**

1. A District may use Lease-Leaseback 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 Developer-Contractor, but all of the trade contractors and suppliers.
4. Solicitation of savings/cost can create cost savings.
5. Developer-Contractors can set Guaranteed Maximum price very early in a project.

**E. Disadvantages of Lease-Leaseback**
1. There have been concerns by OPSC staff and State Allocation Board members that the flexibility of the Lease-Leaseback statutes could lead to faulty practices.
2. Questions exist regarding whether leases can be signed prior to DSA stamp out of plans.
3. Lease-Leaseback is new and not as well understood by the design and construction community.

F. Simple Steps to Implement

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

1. Determine whether Lease-Leaseback is the appropriate delivery method for your project.
2. Develop preliminary Lease-Leaseback selection criteria with an understanding of the relative importance of design, construction and financing components of the project.
3. Complete the design, if not already done.
4. Ensure that any title or other land use or contractual limitations on the availability of Lease-Lease Back are researched and understood.
5. Work closely with the attorney you intend to have develop the Preliminary Services Agreement, Site Lease and Facility Lease.
6. Develop a Request for Qualifications or Request for Proposal to allow you to select the most appropriate firms for an interview and final selection.
7. Interview appropriate firms.
8. Negotiate with the selected Developer-Contractor the approach to the project: business terms, schedule, and method to set price such as a Guaranteed Maximum Price.
9. Obtain price proposals from subcontractors and vendors, select the trade contractors and vendors, set the Guaranteed Maximum Price or other price, and sign (or amend) the leases and obtain Board approval.
10. Perform the work of the improvements.
11. Commence construction.
12. Complete the lease term payments and procedures of the lease and close the leases.
Chapter 8 - PIGGYBACK CONTRACTS

A. Description
The Piggyback delivery method has been widely used in the school construction community to acquire a variety of portable and modular buildings and other items. Specifically, this procurement method is often used to purchase such items as modular buildings, telecommunication systems, data systems, security systems, classroom supplies, furniture, computers, and playground equipment. However, using Piggyback contracts to acquire portable and modular buildings and some associated site work has evolved over time into a school construction delivery method which represents an alternative to the formal bid process.

In practice, a school District may be able to use the pricing from a Piggyback contract held by another school District or public agency to negotiate a contract in the absence of any additional public bidding. Of course, there are formal bid procedures and other Piggyback procedures which must be followed by the original or originating District. However, Districts can use this delivery method to avoid the time, expense, and market uncertainties associated with formal bidding. Although certain advantages can be attained through the use of this process, it is important to first take a look at the enabling legislation and the relationships between the different parties involved in this process.

A Construction Manager can be used with the Piggyback contract. This is an alternative procurement only available for certain types of buildings. Construction fees may be either hourly not-to-exceed, fixed negotiated price or a percentage of bids.

B. Enabling Legislation
Public Contract Code section 20118 is the primary legal authority under which Piggyback contracting is conducted. Key elements of this section of the code are as follows:

A school District without advertising for bids may authorize by contract any public corporation or agency to purchase materials, supplies, equipment, and other personal property for the school District in the manner in which the public corporation or agency is authorized by law to make purchases. Upon receipt of any such personal property, the school District may draw a warrant in favor of the public corporation or agency for the amount or the approved invoice, including the reasonable costs for furnishing the services incidental to the purchase of the personal property.

There historically have been a variety of interpretations of this section and the process and procedures that are authorized by it. What constitutes “personal property”? And how does “personal property” differ from a “public work”? Further, is it necessary that a School District contract with another public corporation or agency, or is it possible to contract directly with the manufacturer of the “personal property”?

On January 24, 2006, the Attorney General issued an opinion (No. 05-405) intending to clarify certain matters relating to the way Piggybacking has been practiced in the school construction industry. Of primary importance in this opinion is his contention that “personal property” as used in PCC section 20118 does not include modular buildings affixed to permanent foundations. This leaves open the option that Districts can purchase buildings affixed to wood foundations or those that are not permanently affixed to concrete foundations. Also, the opinion included the determination that a District must contract with another public agency for the acquisition of “personal property” under PCC 20118 and not directly with the manufacturer as has customarily been done.

Although the State Allocation Board sought to clarify this process by requesting this opinion, many questions remain. Can an assignment arrangement be used as a method to contract directly with the manufacturer? How much site related work is permitted under this opinion?
School Districts should consult with their attorney for answers to these and any other questions relating to Piggybacking.

During 2006, the Legislature approved and the Governor signed AB 1967 which amends Section 20118 of the Public Contract Code to clarify that school districts may “Piggyback” on contracts of other units of local government and may offer their own contracts to be Piggybacked by others. However, AB 1967 did not clarify which types of modular construction are allowable as personal property. Districts should consult their attorneys before attempting to utilize this delivery method.

C. Relationship of the Parties

School Districts will in essence be assuming contract terms and pricing from another public entity. It is important that due diligence is performed to ensure that the originating District has performed all of the appropriate procedures in establishing its Piggyback bid. Additionally, a contractual relationship will be established between these two entities for the purpose of purchasing buildings or other items. It is important that Districts ensure that their project requirements for quantity, time, and dollars are included in the contract documents.

This contractual arrangement is especially important in light of the fact that the buildings will need additional site work not included in the Piggyback contract in order to integrate them into the given site. Earthwork, site concrete, utility connections, and fencing are examples of additional work that will likely be performed by other contractors. The sequencing and performance of this site related work will be greatly dependent upon the approval and delivery of the buildings. School Districts need to be aware of their relationships and contractual arrangements with other contractors and vendors when establishing the contract between themselves and the originating District and the manufacturer.
D. **Advantages of Piggyback Contracts**
   1. Elimination of the bid process for allowable buildings results in a time savings.
   2. The manufacturing process can produce significant time and cost savings over the site built approach.
   3. Manufacturers typically project and anticipate materials requirements in advance. This can serve to mitigate both shortages and price escalations.
   4. Although the manufacturer’s building plans must be integrated into the Architect’s and overall project plans, the time and cost of designing the buildings are virtually eliminated because of repetitive use structures.
   5. Architectural similarity between classrooms on a given site or those at other schools is easier to achieve when modular buildings are used.

E. **Disadvantages of Piggyback Contracts**
1. Significant legal questions remain concerning the use of this mechanism for the construction or placement of buildings. School Facility Program funding may not be available for projects procured pursuant to Piggyback contracts.
2. School Districts become heavily dependent upon a single source for the success of their project.
3. Durability over time can be an issue depending upon the type of building being purchased.
4. Although a formal bid process has been conducted by the originating agency, the public may perceive the end result as a “no bid” contract.
5. The modular industry has had its share of difficulties recently including insolvencies. Many legal issues can arise regarding the legal status of uninstalled buildings. Additionally, since the acquisition of the building(s) is single source, the ability to quickly identify an alternative source can be challenging.
6. Site work cannot commence until all drawings for the project are approved by DSA. Oftentimes, poor coordination between the manufacturer and the design Architect can result in project delays.
7. The timing and relationship between site contractors and vendors and the manufacturer can result in significant additional costs when delays occur.

F. Simple Steps to Implement

I. District as originator of Piggyback relationship.
   1. The initiating or original school District determines that it is in its best interest to proceed with a Piggyback contract.
   2. District contracts with an Architect to prepare bid performance specifications with a Piggyback provision.
   3. District advertises for bids for a specific project with the ability to allow future Piggyback contracts.
   4. District receives bids and bid bonds for project with Piggyback provisions.
   5. District awards contract with Piggyback provisions at a public meeting.
   6. District issues contract per the contract documents.
   7. Manufacturer executes contract documents and provides bonds and insurance and any other required certifications contained in the specifications.
   8. The modular building(s) is (are) designed by the manufacturer and reviewed by the District Architect and submitted to DSA for site specific approval and a Previously Checked approval for the building(s).
   9. DSA approves building(s) on a Previously Checked basis.
   10. DSA approves the site-specific plan.

II. District using modular originated by other District.
   Other School Districts can avoid the public bidding, plan development, and approval process for the building portion of the project by selecting this manufacturer and contracting with the originating District in accordance with the following process:
   1. Determine whether there is a valid existing contract upon which to Piggyback.
   2. Manufacturer shares information relating to the Preliminary Check (PC) building(s) and the Piggyback contract with other interested school Districts.
   3. District has the option to review other Manufacturer’s Piggyback information.
   4. Manufacturer submits pricing from original Piggyback contract to District.
   5. District legal counsel reviews original contact and provides opinion.
   6. District finds that Piggyback contract is in its best interest.
   7. District Board approves contract.
8. Originating school District receives a contract from new District.
9. Originating school District executes contract and returns with bonds and insurance to new District.
10. Manufacturer submits PC plans to new project Architect.
11. DSA approves site-specific plan incorporating PC approved building plans.
12. District issues a Notice to Proceed for fabrication and installation.
13. District contracts with DSA certified inspector to perform in-plant daily inspection of modular construction
14. Manufacturer reviews plans and schedule and coordinates delivery of buildings to the site with the District Architect.
15. Manufacturer sets up building(s) on the developed school site and performs incidental installation and site work.
16. Notice of Completion (N.O.C.) recorded and final DSA 6 form submitted to DSA by manufacturer, District, and Inspectors of Record.

Although this schematic view may seem lengthy and complicated when viewed in a stand-alone fashion, there are significant cost and time savings involved. Time savings are achieved both in the elimination of the formal bid process and the ability to both accelerate when needed and continue with the manufacturing of the buildings during inclement weather. Cost savings can be achieved at both the bidding level and the building cost level through the potential avoidance of market price fluctuations.
Chapter 9 - DEVELOPER BUILT

A. Description

Developer Built schools 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 a negotiated procurement as part of the school fees discussions. The District hires 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 State Architect 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 Multiple 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 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.

Some Developers seek only to construct a school rather than mitigate impacts of development on school districts. In those cases, a Lease-Leaseback arrangement as addressed above is utilized to receive the desire result of constructing the project.

C. Relationship of the Parties

Under Developer Built schools, 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.

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: The Architect may be a subconsultant to the Developer.
- Architect – District: The Architect is responsible to the Developer, not the District, for meeting the pre-established budget and timeline. The Architect remains responsible to the District to provide a design that conforms to the District’s stated requirements and applicable codes.
- Contractors – 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. Advantages of Developer Built
1. May bring construction input into design.
2. May facilitate Value Engineering.
3. Developer contribution may be greater than statutory fees.
4. Use of commercial/residential components in schools.
5. Design usually blends with surrounding community.

### E. Disadvantages of Developer Built
1. District has less control of the project.
2. Educational Program components may be more difficult to incorporate into project.
3. District standards for materials and finishes may be more difficult to incorporate into project.

### F. 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. Obtains all required approvals from the Division of the State Architect 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.
Chapter 10 - SUMMARY

Districts want 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, places 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 tools available in the arsenal 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 which method might be best for your next project, here is a brief review of each option. You may also use the Project 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.

DESIGN-BID-BUILD

Design-Bid-Build is the traditional project delivery approach. The Design-Bid-Build model segregates design and construction responsibilities by awarding them to an independent private Architectural firm and a separate private contractor thus separating the delivery process into three linear phases: 1) Design, 2) Bid, and 3) Construction. Its strength is that it is a familiar method recognized by all facets of the industry. Its primary weaknesses are there is no contractor input into design (contractor responsible for construction only) and the system often results in change orders, claims, and lawsuits.

MULTIPLE PRIME

The traditional Multi-Prime delivery method is bid out similar to the design-bid-build method, but in individual trade bid packages for trade contractors, not general contractors. Then the District or Construction Manager manages all of the contracts of each trade, basically replacing the general contractor’s role during construction by providing all of the scheduling, supervision, job trailers, change order negotiations, and basically everything required to build the project.

Multi-Prime changes the trade’s relationship with the District by working directly with the District’s or District’s professional consultant rather than general contractors that were awarded the project by low bid only, not qualifications.

The Construction Manager can provide design assist services as well as the management of District’s subcontractors with some design accountability.

CONSTRUCTION MANAGEMENT AT-RISK

Construction Management At-Risk (CMAR) is a project delivery method where a Construction Manager is hired under a professional services agreement on a fee basis but the relationship changes and ends with a fixed price contract after construction (risk). This professional services agreement provides a blend of traditional Construction Management in the design and bidding stages, along with a site presence directing the construction process in the field.

The use of a Construction Manager At-Risk is optimized if they are available at the earliest stages of a project. The Construction Manager At-Risk is able to align the District’s expectations from the beginning of the design process through the construction process. The
Districts have the ability to make a qualifications based selection that leads to loyalty of that CMAR to the District. In many situations, the CMAR acts like an extension of the District staff. Construction Management At-Risk provides design assistance and becomes the general contractor during the construction stage with some design accountability.

**DESIGN-BUILD**

Design-Build is a project delivery method whereby there is a single contract with one entity to design and construct the project. The Design-Build model combines design and construction responsibilities by awarding them to one entity, under one contract. A single contract may save time and money with less claims or lawsuits.

Design-Build, when it fits, is a great way to save money, save time, achieve high quality, and avoid claims and litigation. It is not a panacea or cure-all for a District’s facilities program but can be an effective tool when applicable, and properly implemented.

Under Design-Build the Design-Build Entity has complete design responsibility, meaning the contractor assumes all risk for design and construction, except for the risks the District elects to retain. These risks can include abatement, unforeseen conditions, District additions to scope, etc.

**LEASE-LEASEBACK**

The Lease-Leaseback approach is to select an organization, commonly referred to as the Developer-Contractor, to develop a new building or improve buildings on property the District owns. A Construction Management firm may serve as a Developer-Contractor. A common mechanism is to simultaneously execute two lease documents, a Site Lease and a Facilities Lease. A Site Lease of the property gives the Developer-Contractor the right to develop the project. A Facilities Lease gives the Developer-Contractor 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.

The statutes authorizing this approach are very broad and therefore many variations and different approaches to Lease-Leaseback have been refined. Different Districts and their Attorneys have used or allowed different approaches to financing, if any; selection of the Developer-Contractor, design responsibility, lease terms, and method of selecting trade contractors. This flexibility is the main attraction for Lease-Leaseback.

Under Lease-Leaseback the contracted entity may provide design assistance or hold the complete design responsibility. The contractor is responsible for construction with some or all design accountability.

**PIGGYBACK CONTRACTS**

The Piggyback delivery method is often used to purchase such items as modular buildings, telecommunication systems, data systems, security systems, classroom supplies, furniture, computers, and playground equipment. However, using Piggyback contracts to acquire portable and modular buildings and some associated site work has evolved over time into a school construction delivery method which represents an alternative to the formal bid process.

With this method, there are significant cost and time savings involved. Time savings are achieved both in the elimination of the formal bid process and the ability to both accelerate when needed and continue with the manufacturing of the buildings during inclement weather. Cost savings can be achieved at both the bidding level and the building cost level through the potential avoidance of market price fluctuations.

Under piggy-back contracting, the contractor assumes responsibilities according to contract requirements of previous public agency.

**DEVELOPER BUILT**
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. Developer Built can be a good alternative for a residential Developer in lieu of paying Developer fees. Schools may also be delivered in a timely manner. This method may also be a good way to build a school in a densely populated area, whether or not a part of a mixed use development. It is certainly another useful tool Districts may use for the development of new school facilities.

Under Developer Built the Developer may provide design assistance or complete design responsibility. The Developer decides how to contract for the design and construction.

CONCLUSION

In summary, 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, 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 consult legal advice to ensure compliance with public codes, especially when using a new delivery method never before employed by the District.

The Project Delivery Selection Matrix (Matrix) Figure __, 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 criteria. 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 that “Minimize Change Orders and Claims” is very important and weight it at 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 as 8. Finally, knowing early what the initial cost is may be determined as important as a range of local trade bids and also assign Low Initial Cost as an 8.

If three delivery methods are available, Design-Bid-Build, Multi-Prime and Design Build, the evaluation could be this. 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 early fixed price and could weight this an 8.

In comparing 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, Multi-Prime would score higher than Design-Bid-Build but not a perfect score and weight this a 5. Multi-Prime does allow the District to target local trades and a District could weight this as 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 Design Build Entity 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, since 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 3.

<table>
<thead>
<tr>
<th></th>
<th>DBB</th>
<th>MP</th>
<th>DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Change Orders</td>
<td>10</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Commercial Issues</td>
<td>8</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Low Initial</td>
<td>8</td>
<td>8</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>116</td>
<td>154</td>
<td>168</td>
</tr>
</tbody>
</table>

While this evaluation is just illustrative, it serves to reinforce two important points. First, the District has to seriously evaluate what’s 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.
PROJECT DELIVERY SELECTION MATRIX

Project:  SAMPLE

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>DELIVERY METHOD OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>DBB</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td></td>
</tr>
<tr>
<td>Owner design control</td>
<td></td>
</tr>
<tr>
<td>Awarding on best value</td>
<td></td>
</tr>
<tr>
<td>Low initial cost</td>
<td></td>
</tr>
<tr>
<td>Promoting team work</td>
<td></td>
</tr>
<tr>
<td>Less Owner management</td>
<td></td>
</tr>
<tr>
<td>Establishing early final price</td>
<td></td>
</tr>
<tr>
<td>Minimize CO’s and claims</td>
<td></td>
</tr>
<tr>
<td>Community &amp; Political Issues</td>
<td></td>
</tr>
<tr>
<td>Early/Timely completion</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
</tr>
</tbody>
</table>

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

Notes:  
1. In order to avoid the appearance of favoritism, this sample indicates only a hypothetical ranking of one delivery method. The 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.

2. 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 delivery methods are closely ranked.
GLOSSARY OF TERMS

Best Value
A 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
An open process in which the evaluation criteria 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.

Delivery Method
A method that dictates how the design and construction will be completed and with what contractual relationships the parties have in this process.

Design Architect
The Architect responsible for the design-build package, program, not architect that is part of the design-build team who is generally called the architect of record, AOR.

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 the may have a basis to recover from designers. In some alternate delivery systems, the builders agree to take on some or all design risk.

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 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 price 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, “personal property” is meant to contrast with “a public work” and generally includes buildings, equipment, materials, or supplies which are by their natures not permanently affixed to a site.

**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 (RFI)**
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. And 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 unbonded 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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Alternative Delivery Solutions LLC
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