

William H. Galvin Middle School

Canton, MA

School Building Committee
Meeting #8

January 3, 2024



TODAY'S AGENDA

-
- 01 CALL MEETING TO ORDER
 - 02 PROJECT APPROVALS
 - December 20, 2023 Meeting Minutes
 - 05 CONSTRUCTION DELIVERY METHOD OVERVIEW
 - 06 PUBLIC COMMENT
 - 07 NEXT MEETING
 - 08 ADJOURN

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CM at Risk

(M.G.L. Chapter 149A)



Design-Bid-Build

(M.G.L. Chapter 149)

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



Chapter 193 of the Acts and Resolves of 2004

Known as the public construction reform law, these Acts created a new statute, MGL Chapter 149A, which contained provisions authorizing and governing the use of two optional alternative delivery methods for public construction projects in Massachusetts: construction management at-risk (CM at Risk) for building projects estimated to cost \$5 million or more and design-build for public works projects estimated to cost \$5 million or more. The provisions of MGL Chapter 149A took effect on January 1, 2005.

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



DESIGN-BID-BUILD EXPLAINED

- “Traditional approach” for public construction
- Project designed by a team of Architects and Engineers to complete construction documents with no contractor involvement during design
- Once plans are completed, bids are solicited from filed trade-contractors and general contractors
- Low “responsive” bidder is awarded the project
- Contract value is based on a “lump sum” amount
- Change orders resulting from scope change and unanticipated site conditions will increase the final construction cost

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CM AT-RISK (CMR) EXPLAINED

- CMR hired during the design process based on qualifications and fee
- CMR provides design phase, pre-construction and construction services
- CMR provides cost estimates throughout design phase and offers cost-saving ideas
- CMR becomes the builder of the project (the “contractor”)
- CMR participates in trade prequalification process
- Owner participates in sub-contractor selections
- Option for early release bid packages or “fast-track” a schedule
- Contract value is based on “Guaranteed Maximum Price” (GMP) with open book accounting
- Change orders resulting from scope change and unanticipated site conditions may increase the final construction cost

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



OPM ROLE FOR BOTH CMR AND D-B-B

- Cultivate GC/CMR interest in project
- Draft GC/CMR Request for Qualifications and Request for Proposals and manage/organize the GC GC/CMR selection process
- Assist in drafting and negotiating the GC/CMR contract
- Push for real value during pre-construction phase
- Assist in negotiation of GMP
- Manage “open book” accounting

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CM AT-RISK ADVANTAGES

- Selection based on qualifications, experience & proposed team rather than lowest price/bid
- Design phase assistance with budgeting, site logistics and constructability results in ability to address challenges early
- Early cost estimates & feedback to help in the design process results in a more accurate cost model
- Trade contractors know the CMR prior to submitting bids
- Fast track schedule/early release bids possible
- Team concept with Owner, OPM, Designer

BEST SUITED FOR: Projects that are time sensitive, challenging to define or subject to potential changes; projects requiring high construction oversight due to site logistics and phasing as well as multiple stakeholders.

DESIGN-BID BUILD ADVANTAGES

- Simpler process to manage
- Fully defined project scope for construction
- Perceived as getting “best price” by awarding to lowest responsible bidder
- Owner/Designer can completely control design
- Simple accounting

BEST SUITED FOR: Less complicated projects that are budget-sensitive, but are not schedule sensitive and not subject to change

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CM AT-RISK DISADVANTAGES

- Requires an OPM or Owner with an understanding of experience in the CMR process and GMP mechanics
- Perceived higher up-front cost, due to pre-construction services “filling holes” in scope and/or documents (with result of minimizing future change orders and avoiding delays)
- Potential oppositional relationship when design intent is challenged when “design-to-budget” or “price cutting” is pushed

DESIGN-BID-BUILD DISADVANTAGES

- Linear process may equate to a longer schedule duration
- Hard price not known until bids are received; may require re-design and re-bid if bids exceed budget = schedule delays
- Minimal GC project management
- No GC input in design, planning or budgets
- The designer may have limited ability to assess scheduling and cost ramifications as the design is developed which can lead to a more costly final product
- May foster oppositional relationships between all parties and increases probability of disputes
- Prone to changes and claims which may increase final project cost

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



FILED TRADE CONTRACTOR AND SUBCONTRACTOR SELECTION

CM AT-RISK

- CMR actively participates in the prequalification of filed trade contractors. Must take lowest trade contractor bid.
- Owner has input on all subcontractor (non filed trade) selections. Doesn't have to take lowest bid. Based on our experience we've seen a broader pool of subcontractors bid on CMR projects.

Design-bid-build

- Trade contractor prequalification is done by Owner, Architect and OPM. Must take lowest responsible trade contractor bid.
- Owner has no input on subcontractor selection.

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



KEY DIFFERENCES BETWEEN DESIGN-BID-BUILD AND CM AT-RISK

With **CMR** – you are hiring a firm that manages the construction of buildings

With **Design-Bid-Build** – you are purchasing a building in accordance with plans and specifications

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



PROCUREMENT PROCESS

CM AT-RISK

- 2 phase selection process.
 - Solicit, receive, and review qualifications
 - Invite qualified firms to submit technical and price proposals
 - Review technical proposals, interview firms, rank firms
 - Open and review price proposal, rank firms again
 - Select a firm
- Owner gets to interview team proposed before firm is selected

Design-Bid-Build (General Contractor)

- Pre-qualify GC firms to bid on the project. Must take the lowest responsible bid.
- No input on GC's staff. No guarantee who (staff) will manage your project.

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



GENERAL PROJECT RISKS REGARDLESS OF DELIVERY METHOD USED

- Unforeseen building or site conditions
- Incomplete architectural documents
- Poor sub-contractor performance
- Subcontractor or Trade contractor failures
- Working on and around occupied facilities
- Complex site logistics
- Adversarial team environment
- Inadequate staffing or general requirements
- Potential bid protests

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



HOW THE CM AT-RISK CAN HELP MITIGATE PROJECT RISK

- Opportunity to pre-qualify CMR's and more specifically their teams
- Pre-construction services to address project risks
- Confirm existing conditions and provide exploratory services
- Design-to-budget process with team members
- Open book accounting
- Constructability reviews to fill in gaps in project design and detailing
- They participate in sub-contractor pre-qualification process
- Robust and comprehensive bid packages
- Options to “fast track” trades

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



PRE-CONSTRUCTION

CM at-Risk

- Provides cost estimating services, cost saving suggestions and advice on items such as logistics, scope assignment, schedule and constructability based on real life input
- Provides input if cost estimates come in high at any point during design – CMR works with team to develop value engineering list for pricing and consideration
- The above services are paid for via a pre-construction fee. However, the fee is typically nominal compared to the overall cost of the work.

Design-Bid-Build

- No input from the GC during the design phase

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



SCHEDULE / EARLY RELEASE – FAST TRACK

CM at-Risk

- Ability to fast track the design/construction process via early release packages. Depending on the planned start, duration and completion of construction, this ability to fast track should be considered an “option” and not a “given”
- The advantage to fast track is that construction can commence early which can have certain benefits based on time and can hedge against potential cost inflations in the industry. The disadvantage is that the documents are subject to coordination issues and work commences without cost certainty. It is important to thoughtfully select bid packages that can stand alone and are easy to pull out of the overall project scope.

Design-Bid-Build

- Construction commences after bidding period and documents are complete
- Due to the documents being complete, costs are certain at the time of bid opening

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



COST AND ACCOUNTING

CM at-Risk

- CM includes contingency within the GMP (Guaranteed Maximum Price) to cover work reasonably inferable from the design documents. The CM contingency is transparent and use of the contingency is owner controlled
- The Owner and project team interact with the CM to establish the GMP. Please note that once the CM is selected at the pre-construction phase, there is a level of confidence between the Owner and CM that a mutually acceptable GMP can be reached
- Profit (or fee) and general conditions are fixed. Open book accounting is performed and any unused funds in project requirements, allowances, scope holds and CM contingency are returned to the owner
- Monthly requisition process has more detailed paperwork

Design-Bid-Build

- The GC cost of the work is highly competitive and will likely yield a lower cost up front than CMR. However, please note that GC's objective is to maximize their profit margin because any savings do NOT go back to the Owner at the end of the project.
- There is no "open book" accounting. The GC's contingency is not transparent
- Monthly requisition process is simplified

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CHANGE ORDERS

CM at-Risk

- There will be change orders. It has been our experience that the CO process isn't done in a "pass through" manner, the OPM, Designer, and Owner are involved in the process and know ahead of time that a CO is being issued
- The GMP covers work not necessarily in the documents but reasonably inferable. Thus many changes that would be a CO with a DBB will be absorbed by the CM

Design-Bid-Build

- There will be change orders
- Due to the highly competitive nature of the lump sum bid process, change order work is pursued as "cost opportunities". Any mistakes in the bidding assumptions are typically issued as CO's

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



ADDITIONAL FACTORS

CM at-Risk

- Approach needs to be approved by the Inspector General
- Tends to foster a team approach
- Currently is the preferred method for DCAMM projects over \$10M
- Preferred method for other state agencies such as UMBA and the MSCBA
- **BEST SUITED FOR: Projects that are time sensitive, challenging to define or subject to potential changes; projects requiring high construction oversight due to site logistics and phasing as well as multiple stakeholders.**

Design-Bid-Build

- Roles and responsibilities of the team are very clear
- **BEST SUITED FOR: Less complicated projects that are budget-sensitive, but are not schedule-sensitive and not subject to change.**

January 3, 2024

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



DCAMM APPLIED SINGLE PROJECT LIMIT

As part of the DCAMM certification process, DCAMM only allows bidders to bid on projects of a certain size, based on their historic capacity to perform.

Assuming a Total Construction Cost range of \$168M, the following firms are certified to bid on this size of a project:

- 22 total firms

Company Name	Address	Single Project Limit
Barr & Barr Inc.	New York, NY	\$250M
Bond Building Construction, Inc.	Medford, MA	\$269M
Brait Builders Corporation	Marshfield, MA	\$177M
Callahan, Inc.	Bridgewater, MA	\$182M
Clark Construction Group, LLC	Bethesda, MD	\$750M
Consigli Construction Co., Inc.	Milford, MA	\$414M
Commodore Builders, LLC	Waltham, MA	\$166M
Dimeo Construction Company	Providence, RI	\$415M
Fontaine Bros., Inc.	Worcester, MA	\$174M
Gilbane Building Company	Boston, MA	\$537M
J.F. White Contracting Company	Framingham, MA	\$432M
Lee Kennedy Co., Inc.	Quincy, MA	\$231M
LiRo Program and Construction Management, PE P.C.	Syosset, NY	\$414M
O&G Industries, Inc.	Torrington, CT	\$175M
Shawmut Design and Construction	Boston, MA	\$367M
Skanska USA Building Inc.	Boston, MA	\$415M
Suffolk Construction Company, Inc.	Boston, MA	\$1B
The Whiting-Turner Contracting Company	Springfield, MA	\$317M
Tishman Construction Corporation	Boston, MA	\$500M
Turner Construction Company	Boston, MA	\$826M
W.T. Rich Company, Inc.	Natick, MA	\$169M
Walsh Construction Company	Chicago, IL	\$342M

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



CM at-RISK PROCUREMENT

- 1/17/24 - GMS SBC approves CMR Method
- 1/31/24 - LeftField submits application to OIG
- February – Solicit and Review Qualifications Packages
- March – Invite qualified CMRs to submit Proposals
- April – Host Interviews
 - Select a CMR
- May – CMR on board, working with team on logistics, schedule, and reviewing documents
 - CMR prepares project estimate (along with Ai3's estimator)

AVAILABLE FEASIBILITY FUNDS

- Uncommitted Funds Sufficient
- \$56,240 Feasibility Study Contingency
- Expected CMR Feasibility Pre-Con Fee range: \$35,000 to \$45,000

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD



SUGGESTED VOTE FOR 1/17/24 MEETING:

SBC would like to proceed with a Construction Manager at-Risk procurement method and approve LeftField to proceed with submitting the application to the Inspector General's Office

OR

SBC would like to proceed with Design Bid Build procurement method