



2024 Fall Conference at The Ashore Resort
Ocean City, Maryland

Construction Manager AT-RISK DELIVERY METHOD

Scott Saxman

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INTRODUCTION



Scott Saxman

Division Vice President

Whiting-Turner

WHAT IS IT?



Construction Management at-Risk refers to a project delivery method in which the Owner contracts a Construction Manager (CM) to provide a range of services during each milestone of a project's life cycle with the caveat of developing a Guaranteed Maximum Price (GMP) within project budget and tolerances, after the bidding stage.



The term "at-risk" refers to the concept that the CM guarantees the maximum cost of the work through the GMP and assumes all responsibilities of the trade contractor's work through direct contract means.

RELATIONSHIP GC TO OWNER VS CMaR TO OWNER

GC

General Contractor

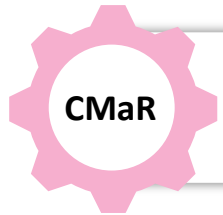
- ✓ Lump Sum bid plans and specifications
- ✓ Changes in documents or omissions result in change orders
- ✓ Profit for GC is spending less than the lump sum bid
- ✓ Transparency of cost accounting is limited
- ✓ Owner generally does not have a say in the GC project staff

CMaR

**Construction
Management at-Risk**

- ✓ Selected during the preconstruction process based on qualifications
- ✓ Project team is part of the selection criteria
- ✓ Accounting is open book
- ✓ Financial risk for CM is lessened in exchange for an emphasis on meeting the goals of the project.
- ✓ More flexibility to handle unknown or undefinable situations

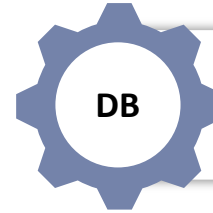
DELIVERY METHODS



Construction
Management at-Risk



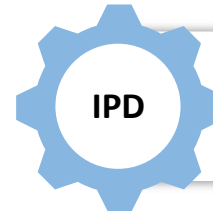
General Contracting



Design-Build



Construction
Management Agency



Integrated Project
Delivery



Construction Management
Multi-Prime

A black and white photograph of a bridge construction site. In the foreground, a worker in a hard hat and light-colored shirt is bent over, working on a large, corrugated metal structure. To the right, another worker in a hard hat and light-colored shirt is also bent over, working on a similar structure. In the background, several workers are visible, some standing and some working on the bridge structure. The bridge structure is made of large, dark metal beams and trusses. The overall scene is one of active construction.

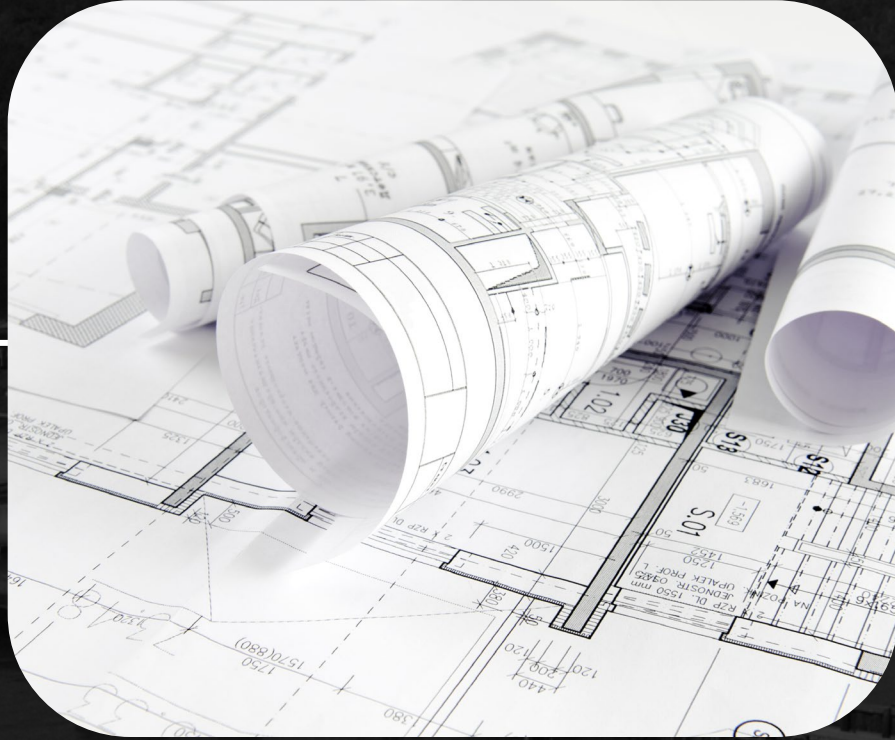
THE HISTORY OF CMaR

AFTER WWII...

construction projects grew in size
and complexity.

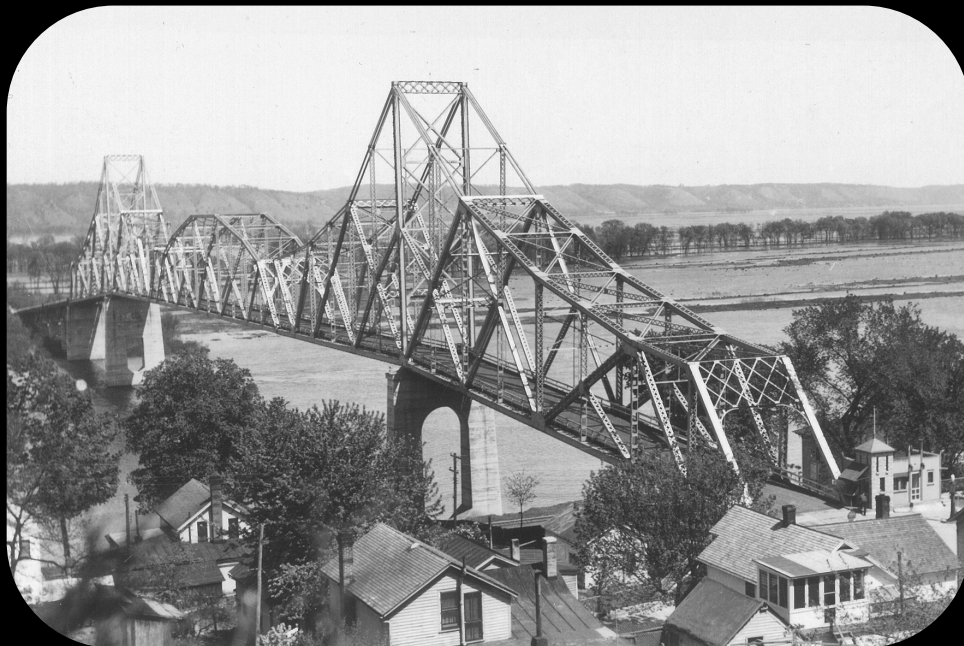


General Contracting...



ran into **issues** with schedule, cost
and quality.

Owners, Contractors and Architects began...



to search for an alternative delivery method that would address some of the **shortfalls** with the General Contracting method of project delivery.

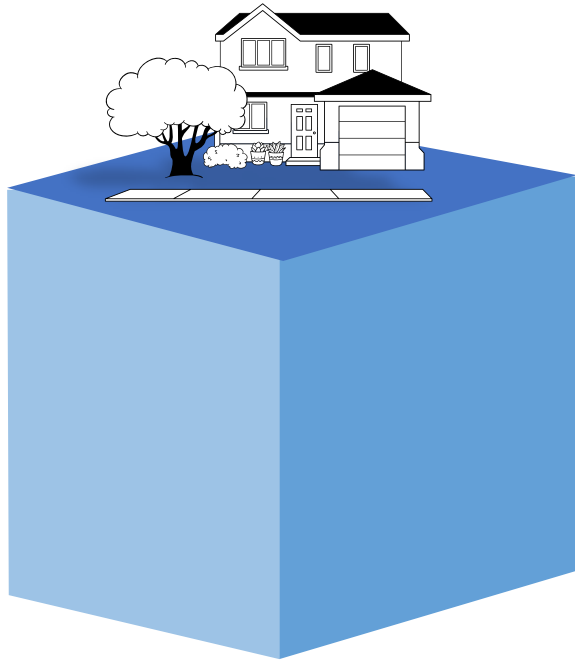


1970s...

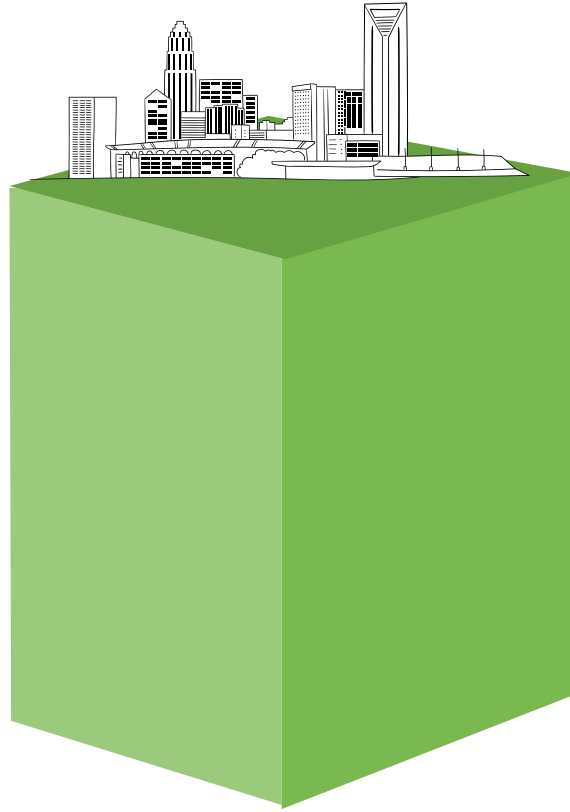


the basis of Construction Management at-Risk
was **born**.

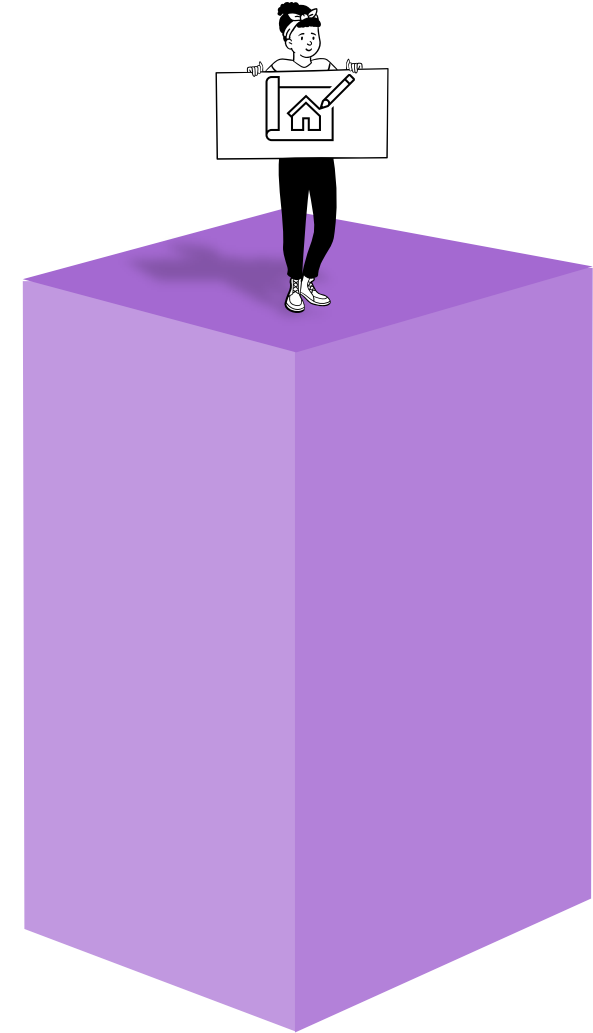
TODAY...



CMAr is the most common delivery method for large/complex private commercial, institutional and industrial projects



Rising of complexity has caused CMAr to grow among public owners



General Contracting is still the most common delivery method

The Why?

Construction Management offers significant owner benefits over general contracting



Design Collaboration and Implementation



Management of Preconstruction Services



Cost Certainty



Risk Mitigation

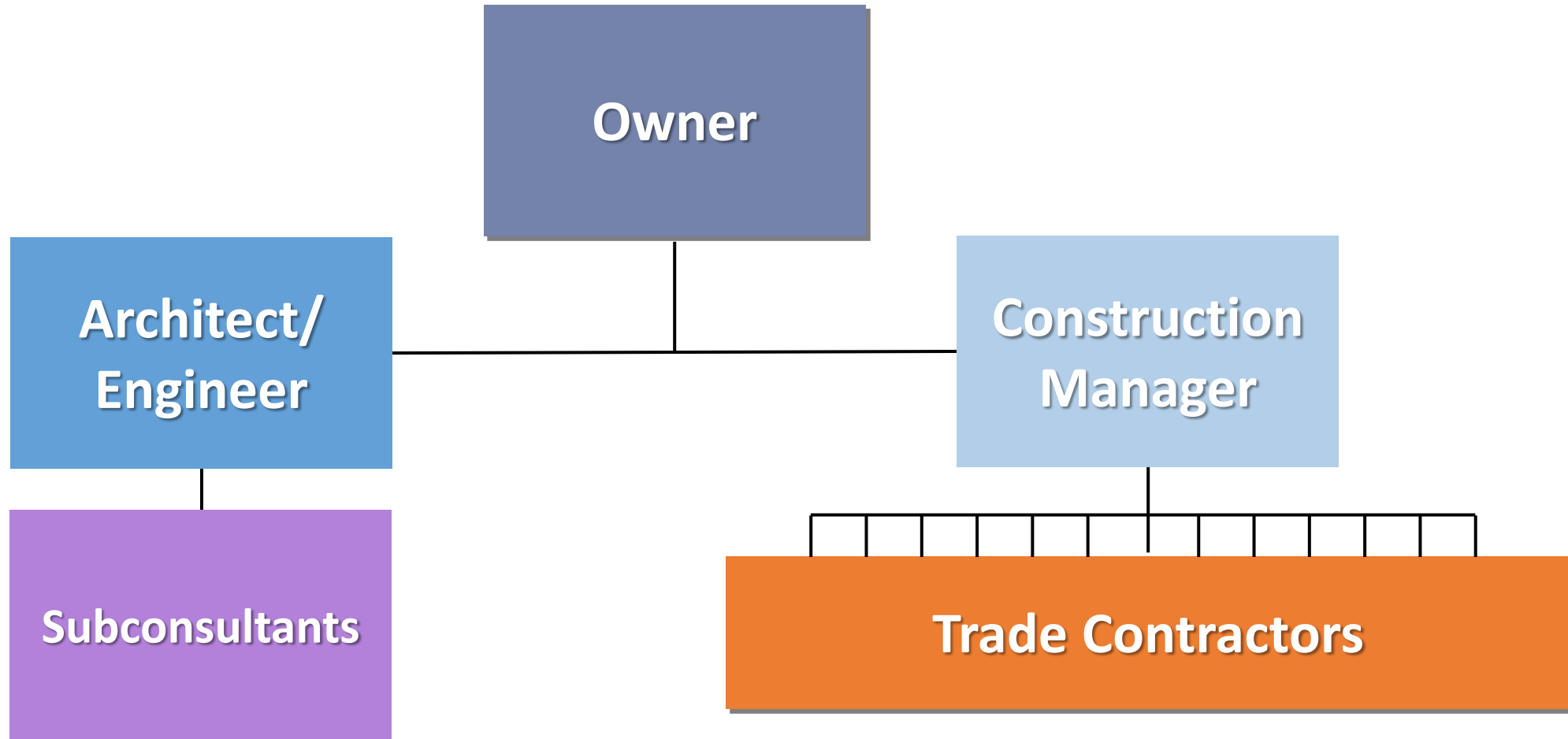


Higher-quality Deliverables



Procurement

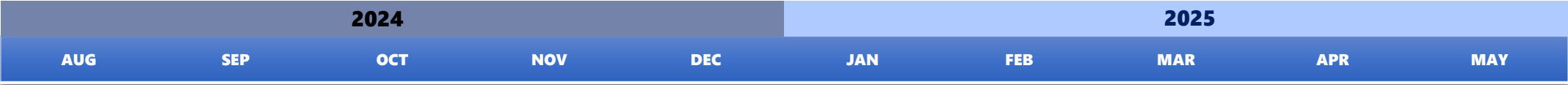
STRUCTURE OF CMaR



TYPICAL PROJECT DELIVERY TIMELINE



PROCUREMENT



Design

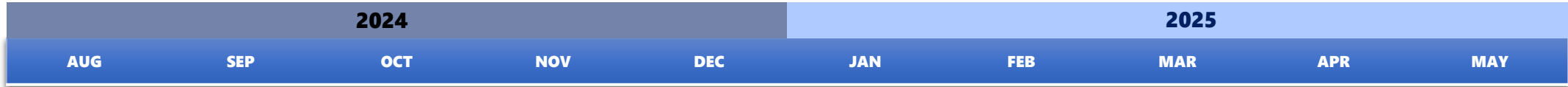
Preconstruction

Construction

Close-out

Long Lead time
procurement can be
difficult to handle in a
General Contracting format.

PROCUREMENT



Design

Procurement

Preconstruction

Construction

Close-out

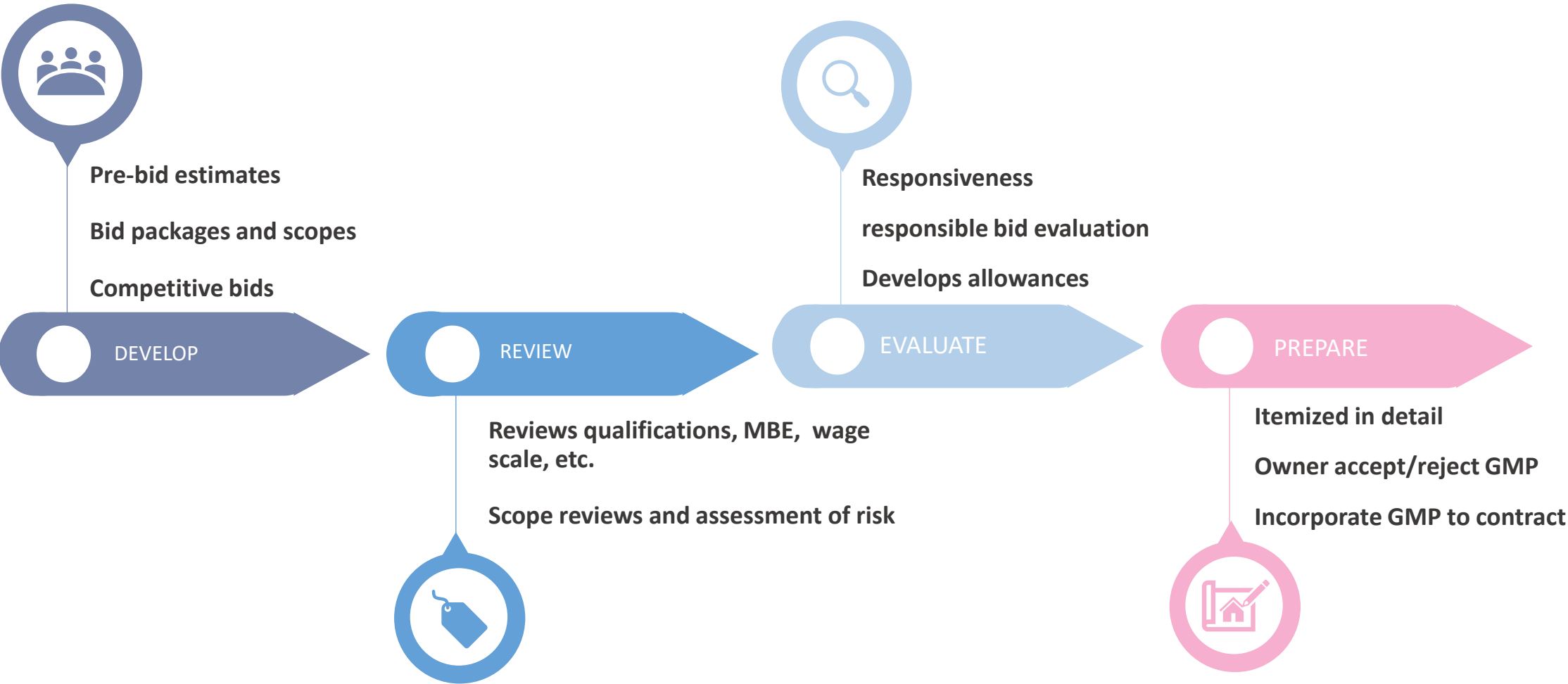
Long Lead time
procurement can be
difficult to handle in a
General Contracting format.

Procurement post Covid-19

What does toilet paper
have in common with
electrical switchgear?



BIDDING PROCESS







CM at-Risk provides
Guaranteed **Maximum** Price

VS

GC provides a
guaranteed **minimum** price

FINANCIAL STRUCTURE OF CMaR



A man wearing a white hard hat with a '30 YEARS' logo and a black Under Armour shirt is sitting at a table. Next to him, a woman with brown hair tied back, wearing a blue safety vest over a floral shirt, is also looking at documents. They appear to be in a professional or construction-related setting.

Contract Format for successful CMaR

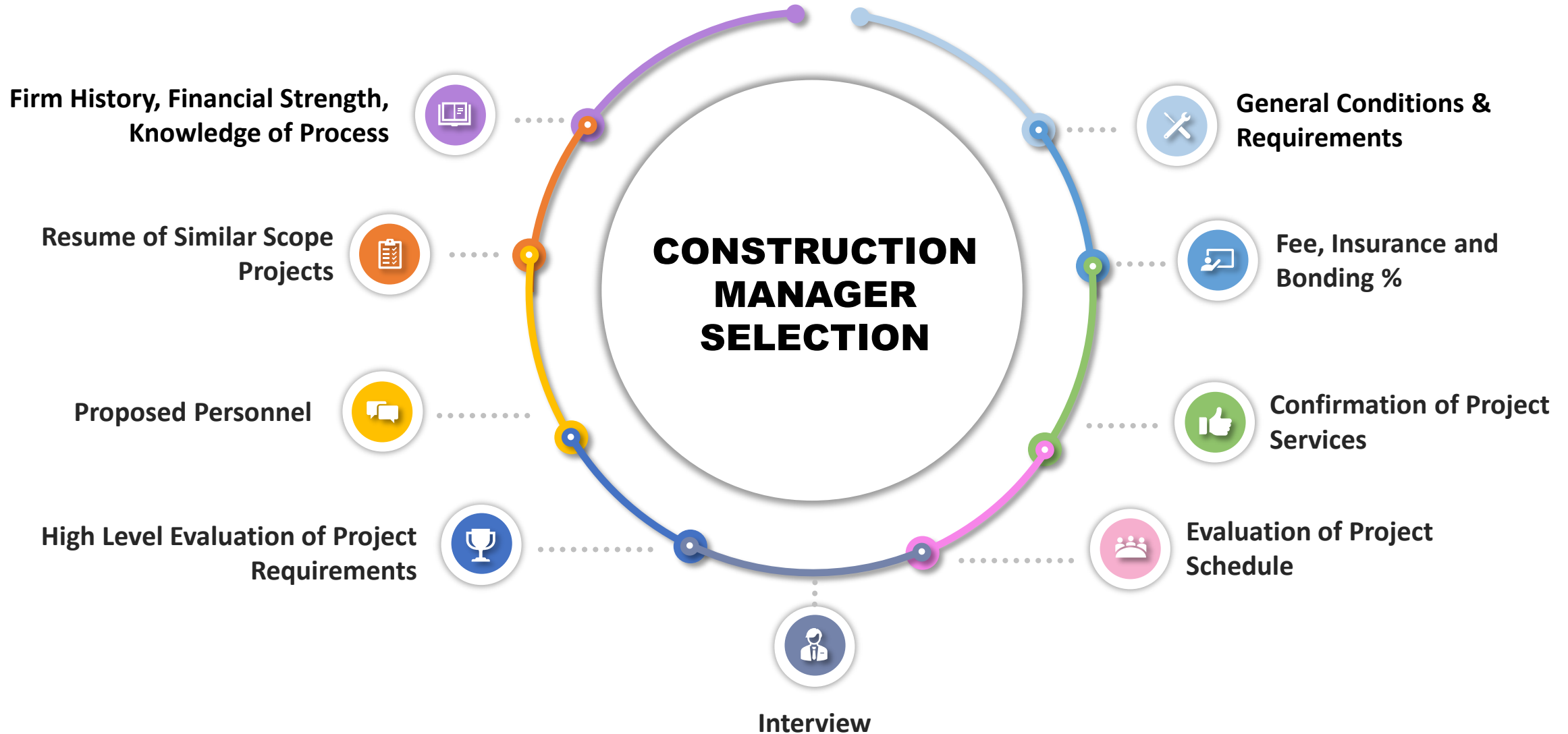
**You need a dedicated
CMaR contract**

**Do not change the title
on your General Contract
and call it a CMaR
contract**

**AIA A133 is a good place
to start, and it is very
customizable**

Request for Qualifications

Request for Proposal



PRECONSTRUCTION SERVICES



**Conceptual Budgeting / Cost
Estimating**



Value Engineering



Constructability Review



Logistics Planning



Sequencing and Scheduling



**LEED and Sustainability
Planning**



**Building Information
Modeling (BIM)**



**Trimble Total Station
Surveying and Laser
Scanning**

CONSTRUCTION SERVICES



Staffing

Strong incentive to staff the job appropriately for success



Coordination

Collaborative process resolves issues as partners



Schedule

Fully manages the schedule with owner and architect input



Quality

Fully responsible for quality & incentive to exceed specifications



Safety

Fully responsible for jobsite safety & fines from MOSH/OSHA makes this critical



Project Closeout

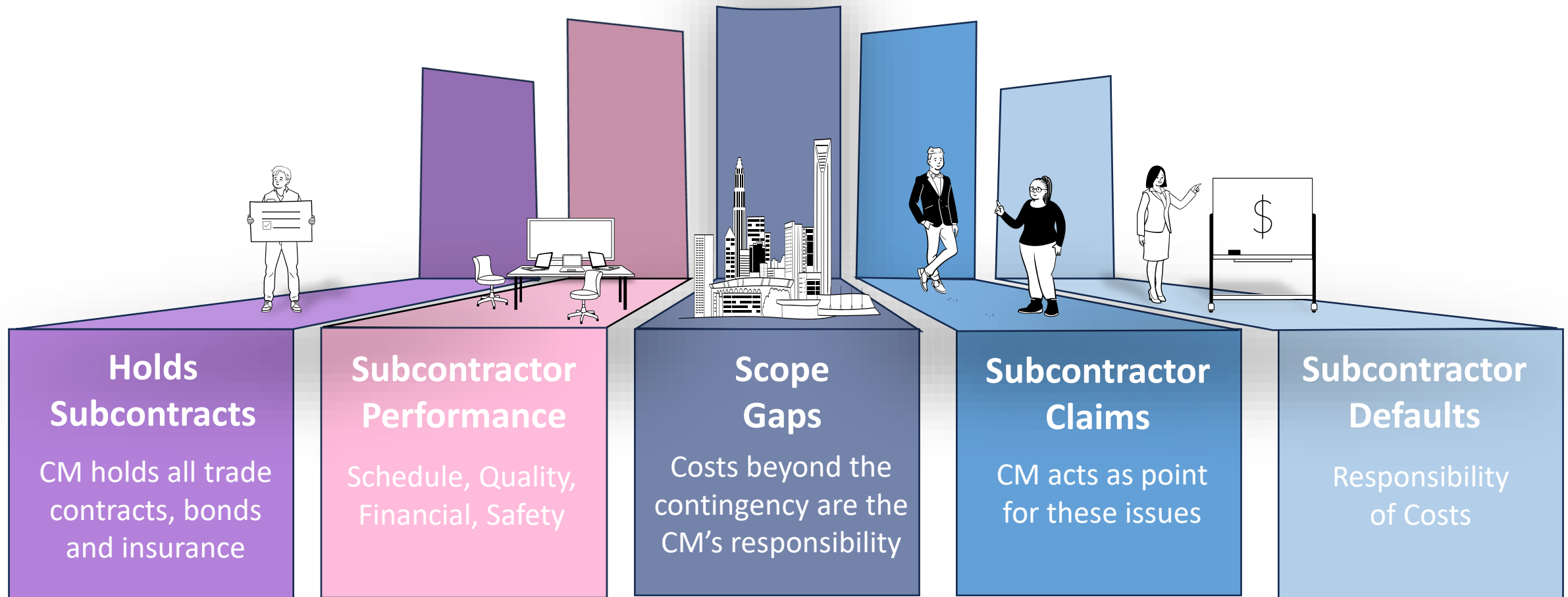
Complete support for all owner occupancy requirements and closeout



Flexibility

Coordination of utilities, manage owner move-in, coordinate designers for additional services

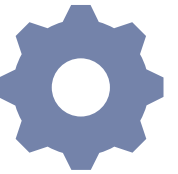
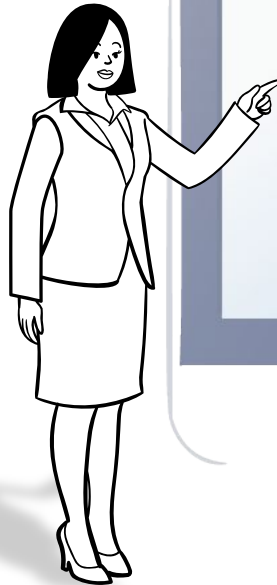
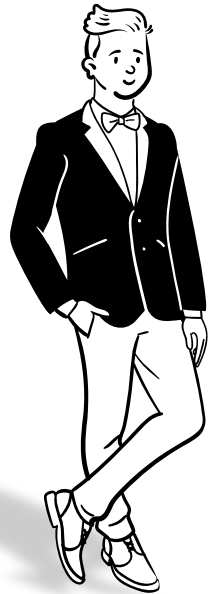
CONSTRUCTION ISSUE MANAGEMENT



POST CONSTRUCTION SERVICES

Highly customizable

from standard closeout and training to
support for moving, furniture and
equipment installation



JOB TYPES THAT MAY NOT MAKE SENSE

2D.



Flooring



Carpet



Overlaying road



Painting



JOB TYPES THAT MAY NOT MAKE SENSE

3D.



Smaller building



Straight forward



**JOB TYPES THAT MAY
MAKE SENSE WITH
CMaR**

3D Complex.



Larger project



**Larger number of
subcontractors**



Complicated systems



**Agency does not have
as experience with
project type**



JOB TYPES THAT MAY MAKE SENSE WITH CMaR

4D Complex.



Complex schedules



Larger number of
subcontractors



Complicated systems



Multiple phases



CMaR ADVANTAGES & DISADVANTAGES

ADVANTAGES

- ⊕ Owner picks Contractor & Team
- ⊕ Schedule Preconstruction & Construction Phases
- ⊕ Prequalify trade contractors
- ⊕ Tailor bid packages to meet local requirements
- ⊕ Competitive bids
- ⊕ Open-Book accounting
- ⊕ Team concept
- ⊕ Better trade contractor responses
- ⊕ Control cost, schedule and quality
- ⊕ CM holds contracts
- ⊕ 100% bonded
- ⊕ Guaranteed Maximum Price
- ⊕ Minimize RFIs producing change orders
- ⊕ Constructor takes ownership

DISADVANTAGES

- ⊖ Higher potential upfront costs
- ⊖ Difficult to evaluate GMP as best possible price
- ⊖ Excessive reliance on allowances
- ⊖ CM may pad budget for larger shared savings potential

QUESTIONS?

Contact:

Scott Saxman

Whiting-Turner

Phone: 410-677-3253

E-mail: scott.saxman@whiting-turner.com