

Principles of Professional Construction Management

What is Professional Construction Management?

Professional CM Overview

- CM-related services are required on every project
- Historically performed by A/E or by owner in-house
- Use of independent CM is an outsource decision
 - Owner resources and staff augmentation
 - Need to enhance project performance
- Scope of CM services dependent upon owner's needs and as reflected in contract
- Professional, fee-based relationship with no (or limited) risk of contractor/designer performance

Construction Management: An Historical Perspective

- Early use of construction management
 - Enhanced computer-based scheduling (PERT/CPM)
 - 1960s with multiple prime contracting delivery
 - Dissatisfaction with pure design-bid-build and need for phasing
 - Concepts of VE, fast tracking and constructability reviews
- CM began accelerating in late 1970s
- Formation of CMAA in 1982
- Creation of CM at-risk (i.e., CMAR and CM/GC)
- CM Certification and licensure
- Broad use on most major public sector projects, although fits and starts at federal level

Professional CM: Multiple Prime Delivery

- The design professional works with the owner and there's many trade contractors and suppliers that have direct contracts with the owner.
- The CM advisor, while having a direct contract with the owner, providing management services and scheduling coordinating and other services to the owner also has an indirect reporting line to the different trade contractors that might be working on these projects.

Professional CM: Design-Bid-Build

• In Design-Bid-Build, the CM is not taking responsibility for the construction contractor's work, nor for the design professional's work, but is there to help the process work better and let the owner achieve its goals by, in the pre-construction phase, providing services.



The Challenge with Terminology

- Terms associated with professional CM
 - o Agency CM
 - Fee-based CM
 - CM advisor
- Program management vs. construction management
- Construction Management at Risk (CMAR)

Definitions of Construction Management

- Scope can be large or small
- Based on contract terms and owner needs
- Philosophy dependent upon perspective
 - o CMAA
 - o AIA
 - ConsensusDocs

Construction Management Defined (CMAA)

A professional management practice consisting of an array of services applied to construction projects and programs through the planning, design, construction and post construction phases for the purpose of achieving project objectives including the management of quality, cost, time and scope.

Agency Construction Management Defined (CMAA)

A form of Construction Management performed in a defined relationship between the CM and owner. The agency form of Construction Management establishes a specific role of the CM acting as the owner's principal agent in connection with the project/program.

Construction Manager Defined (CMAA)

A professional Construction Manager (CM) acts as an extension of staff to the Owner and manages the entire project with pre-planning, design, construction, engineering and management expertise that can assure the best possible project outcome no matter what type of project delivery method used. A CM is NOT a general contractor. Few owners maintain the staff resources necessary to pay close, continuing attention to every detail--yet these details can "make or break" a project. CM is often used interchangeably with Project Manager.



Program Management Defined (CMAA)

The practice of professional construction management applied to a capital improvement program of one or more projects from inception to completion. Program Management provides additional benefits such as standardization, leveraged purchasing and economies of scale.

CM/GC (CMAR)

• The CMAR contractor is providing pre-construction services and is also involved in performing and accepting risk of delivery of the project for a specific amount of money.

Differences between Professional CM and CMAR

- One is a delivery system, the other is not
- One is a pure professional service, the other is not
- One has contractual responsibility for price, schedule and subcontractor performance, the other does not

What services does a professional CM perform?

CM Services Generally

- Wide menu of potential services
- CMAA's Construction Management Standards of Practice (2015)
 - Project Management
 - Cost Management
 - o Time Management
 - Quality Management
 - Contract Administration
 - Safety Management
- Performance of services dependent upon phase of work
- Project Phases
 - o Pre-design
 - o Design
 - Procurement
 - Construction
 - Post-Construction

Examples of Major Preconstruction Services

- Establishing and maintaining master schedule
- Preparing budgets and cost estimates



- Reviewing design documents for constructability and breakdown of scope
- Developing market interest in project and procuring subcontractors
- · Coordinating transmittals with agencies
- Running progress meetings

Examples of Major Construction Phase Services

- Establishing and implementing:
 - Contract administration processes
 - Change order control and quality monitoring systems
- Conducting site meetings
- Maintaining master schedule
- Reviewing:
 - Contractor schedules, RFIs and shop drawings
 - Payment applications
 - Safety programs
- Rendering decisions on disputes

Turf Battles: CM vs. Design Professionals

- Historical disagreement as to who is owner's trusted advisor
 - o Who is retained first?
 - O Who has responsibility for what services?
 - Project delivery decisions
 - Running meetings
- Tension is evident in standard form contracts
 - CMAA has CM helping owner select designer
 - o ConsensusDocs is silent, and AIA clearly has architect retained first

How do owners select and contract with a professional CM?

Procuring the CM

- Public and private sector use similar philosophies
- Qualifications-driven selection
 - Capabilities and past performance of CM
 - Key personnel
- Price of services, if considered, is nominal factor



Compensating the CM

- Cost plus fixed fee
 - o Fixed fee of specified amount
 - Time-based personnel cost with multiplier
 - Direct reimbursable expenses
- Lump sum generally payable monthly
- Fixed billable rates plus reimbursable expenses
- Escalation
- Additional services

Professional CM Contracts (Generally)

- Highly dependent upon scope of services
- Professional standard of care
- Reflects manner in which CM is compensated
- "Distancing" of CM liability for the key risk issues revolving around CM services

Standard Forms of Professional CM Contracts

- CMAA (2013) (CM as Owner's Agent)
- AIA (2009) (CM as Advisor)
- ConsensusDocs (2014) (CM Agent)
- Other documents
 - CM versions for owner contracts with designer and construction contractor
 - ConsensusDocs 800 (Program Management)

Contract Overview

- Balancing responsibility with the fact that the CM is an advisor/agent of owner
- Commonality among all standard CM forms
- Key contract terms
 - o Responsibility for design and construction
 - Standard of care
 - Indemnity

Responsibility for Design and Construction - CMAA Perspective

- CM does not assume any responsibilities or duties of designer
- CM's services are to be rendered "compatibly" and in "cooperation" with designer



- Not intended that services of Designer and CM be "competitive or duplicative, but rather complementary"
- Design reviews are to be "advisory" without liability to CM
- CM does not assume any responsibility or duties of contractor
 - No control over means and methods
 - o Performing quality review for benefit of owner, and contractor not relieved from obligations
- Safety
 - Not responsible for contractor's implementation of safety programs or adequacy of programs
 - Not responsible for monitoring or supervising implementation of safety programs

Standard of Care (AIA) - Section 2.2, AIA Document C132

The Construction Manager shall perform its services consistent with the skill and care ordinarily provided by construction managers practicing in the same or similar locality under the same or similar circumstances. The Construction Manager shall perform its services as expeditiously as is consistent with such skill and care and the orderly progress of the Project.

Indemnity - CMAA Perspective

- CM indemnifies owner for damages arising "solely" by negligence of CM or its consultants
- Total liability not to exceed total insurance proceeds paid by CM's insurers
- Owner indemnifies CM for damages "to the extent" arise out of negligence of Owner, Contractor and Designer
- Owner to cause Contractor to indemnify CM "that arise out of or result from" Contractor's negligence

Major Legal Issues Associated with Professional CM

Principles of Professional CM Liability

- Professional service based on standard of care
- Liability to owner
 - Breach of contract
 - Indemnity arising out of claims by other participants
- Liability to third parties
 - Injured workers
 - Economic losses
- Look to cases involving A/E performance of construction administration duties

Aliberti, LaRochelle & Hodson Eng'g. Corp. v. F.D.I.C. (1994)

- CM found liable for negligence and negligent misrepresentation to a bank
 - o Failed to warn the lender at a preconstruction meeting that the budget was inadequate



- Project goes into foreclosure
- Developer convinces CM to be quiet about the budget shortfalls
- Court finds that the CM had a duty to correct misinformation

American Employers' Insurance v. Maryland Casualty (1975)

- Design of new police headquarters
 - o Bowerman was asked to do value engineering
 - o Basement slab could be reduced in thickness and mesh could be substituted for rebar
- Basement floor settled and both A/E and CM sued
- Court found:
 - o Bowerman (though not an engineer) helped determine the building's design
 - Concluded that no insurance coverage for this liability

Construction Phase Liability

- Substantial number of cases both with A/Es and CMs
- Liability for negligent scheduling and coordination
 - o Economic loss doctrine implications
 - Motions for summary judgment
- Liability for safety violations
 - O What does the contract require?
 - O What did the CM do regardless of the contract?
 - Liability found even if a contractor has primary safety responsibility

Peter Kiewit Sons. v. Iowa Southern Utilities (1973)

- Multiple prime contract for power plant
 - Black & Veatch was engineer and CM
 - o Kiewit, one of primes, sued for delays caused by two other primes
 - o Alleged that B&V resequenced schedule to overcome delays and impacted Kiewit
- Conclusion: B&V owed duty of care but did not breach that duty because it was reasonable and proactive
 - Required primes to work longer hours
 - o Relaxed specifications to help Kiewit
 - Showed no favoritism
 - o Updated CPM and made field adjustments as needed



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Caldwell v. Bechtel (1980)

- Bechtel was CM on WMATA project
- Plaintiff Caldwell was a heavy equipment operator
 - Suffered from silicosis
 - o Alleged high level of silica dust in excess of standards and codes and that CM had duty of care
- Bechtel had responsibility for safety enforcement and duty to stop work if there were unsafe conditions
- Court noted a "special relationship" between Caldwell and Bechtel
- Court rejected Bechtel's argument that it only had to use "best efforts" to persuade contractor to comply with safety regulations
- "The significance of the Bechtel-WMATA contract is that once Bechtel undertook responsibility for overseeing safety compliance, it assumed a duty of reasonable care in carrying out such duties that extended to workers on the site."

Conduct as Creating Action in Negligence

- A/E or Agency CM can create a duty of care even without a contract obligation
 - Gratuitous or voluntarily
 - Assumption of duty for jobsite safety creates special relationship to act reasonably and prudently
- Actions which have triggered liability
 - Appointment of safety director
 - Safety inspections & directing that defective equipment not be used
 - Writing letters on how to resolve safety violations

Carvalho v. Toll Bros. & Developers (1995)

- Construction worker killed when trench excavation collapsed
 - o Engineer's contract imposed no duty whatsoever for safety
 - Engineer had actual knowledge of safety hazard



- o Court found this actual knowledge of a dangerous condition created duty on engineer to act
- Principles of fairness
- A professional cannot stand "idly by with actual knowledge of unsafe safety practices on the jobsite and take no steps to prevent injury"

Walls v. Turner Construction (2005)

- CM liable for injured worker of a subcontractor
 - Fell while trying to construct scaffolding
 - No safety equipment supplied
- Decision based on:
 - o CM's duty to monitor performance and take action to minimize loss of life
 - o Acknowledgment by CM executive that it had authority to stop unsafe work
 - CM's "zero tolerance policy" for safety violations
 - o Broad responsibility over sub's work

Although a construction manager of a work site is generally not responsible for injuries under Labor Law §240(1), one may be vicariously liable as an agent of the property owner for injuries sustained under the statute in an instance where the manager had the ability to control the activity which brought about the injury.

Conclusion

Summary and Implications

- Professional CM is a management approach to improve project performance
- "One size" set of services does not work owners need to understand their needs
- Contracts are professional in nature
 - o Perfection not guaranteed
 - Liability is limited