

Chapter 2: The Project Team

Suggested Activities

There are currently several construction delivery systems in use. The students may be a bit confused about how each system is arranged and the various responsibilities. Many of the students have worked in the traditional system, construction management systems, and design-build systems. The instructor could facilitate a discussion with the students concerning the actual use of these systems.

As an alternative activity, the instructor could divide the class into groups to form appropriate arrangements for the delivery systems. After the groups explain their system, engage the students in a discussion about the advantages and disadvantages of each.

Questions and Answers

1. In the traditional contract delivery system, what are the direct contract relationships between the three principal parties?

Answer:

Owner—Architect: for design and administration of the project

Owner—Contractor: for the construction of the project

2. What are the responsibilities of the owner, architect, and contractor under the traditional delivery system?

Answer:

Owner: pays for the project, provides coordination of the project, provides the site, and provides adequate directions.

Architect: provides design and construction documents; acts as owner's agent during construction; provides interpretation of the documents.

Contractor: provides labor, material, equipment and expertise to build project; responsible to develop and implement plan to complete project on or before the scheduled completion date; responsible for coordinating subcontractors.

3. Describe some of the duties of the following positions in the traditional delivery system: owner's representative, architect's contract administrator, and contractor's project manager

Answer:

Owner's representative: prime contact for architect and contractor; conduit of information to the owner; directs architect and contractor.

Architect's contract administrator: specialist in projects under construction; processes shop drawings, progress payments, RFIs, Change orders, and correspondence; contact for contractor; field observations (if no inspector).

Contractor's project manager: Manages contractor's team; responsible for implementing cost, time, and quality controls; representative with owner and architect.

4. What are the lines of communication for a subcontractor who has a concern about the constructability of a system shown and described in the construction documents?

Answer:

The subcontractor must go through contract lines to express concerns to the superintendent or project manager, who will then correspond with the architect, who will correspond with the owner.

5. What are the primary roles of the construction manager in Agency CM?

Answer:

The CM administers the contracts; provides services such as value engineering and constructability reviews; and manages the project.

6. What is the difference between an Agency CM and the CM-at-Risk?

Answer:

The Agency CM performs no work on the jobsite, and is mostly a manager for the owner.

The CM-at-risk provides a guaranteed maximum price (GMP) and actually controls the construction process, even self-performing some of the work. The CM-at-risk is also involved in the preconstruction activities, which separates the CM-at-risk from the typical contractor in the traditional process.

7. Describe the responsibilities of a design-build firm.

Answer:

A design-build firm provides the design, construction documents, and construction of the facility to the owner under one contract. The design-build firm is responsible to provide a facility that will meet the owner's needs and coordinates design and construction within a quality level, time frame, and budget.

8. What type of delivery system is E-P-C?

Answer:

E-P-C represents "Engineering-Procurement-Construction," which is basically a design-build system used for industrial and heavy construction projects.

Additional References

Web sites

1. "Design-Build Institute of America," www.dbia.org.
2. "Construction Management Association of America," <http://cmaanet.org>.
3. "Associated General Contractors of America, Inc.," www.agc.org.
4. "American Institute of Architects" (contract documents), <http://www.aia.org/contractdocs>.

Publications

1. *Professional Construction Management*, Third Edition Barrie and Paulsen, McGraw-Hill, 10/1991, ISBN 978-0070038899.
2. *The CM Contracting System: Fundamentals and Practice*, Haltenhoff, Pearson Education, 5/1998, ISBN 978-0673525000.
3. *Project Delivery Systems for Construction*, Kenig, Associated General Contractors of America, 2011 ISBN 13 976-1936006281