

# Construction Procurement

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*The procurement of construction services brings together the team and resources needed to translate building plans into physical reality.*

Construction procurement activities assist the client in obtaining competent construction services. The architect will prepare bid packages or requests for proposal or qualifications and support the selection, negotiation, and contract award processes.

In most projects construction procurement services are packaged with other architectural services such as design, construction documents, or construction contract administration. Clients sometimes choose to treat construction procurement as a discrete service, however. Traditionally this choice depended on the project, but today the demand for construction procurement services is increasing with the trend toward alternative delivery methods such as construction management and design-build.

The increase in construction claims and litigation and the related trends toward increased control of cost and quality have placed more emphasis on the construction procurement process. Clients want to ensure that construction contractors are well qualified, that services are obtained for reasonable cost, and that their projects are well organized contractually to minimize the potential for costly changes and delays.

## CLIENT NEEDS

Clients are motivated to seek construction procurement services when they do not have the experience or resources to do the task in-house or do not wish to devote in-house resources to the task. Large, complex projects may require contracting with a number of different prime contractors, which requires a great deal of coordination of the bid packages or requests for proposal (RFPs) and requests for quotes (RFQs). Often such projects are on tight time schedules with phased, fast-track work plans, necessitating even greater coordination of the procurement process and a higher level of effort for the construction procurement team.

Many clients look to architects for advice regarding the best delivery method for a project, recognizing that delivery method affects risk, schedule, and cost. The architect also may assist in locating qualified contractors, either by prequalifying a bidders list or recommending firms for negotiated procurements.

Clients often want maximum control of the procurement process and will preapprove a bidders list and want to be involved in contractor selection in order to ensure selection of qualified contractors and subcontractors. Clients constructing complex facilities such as laboratories and clients who will be long-term owner-occupants are usually most interested in quality control.

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## Summary

### CONSTRUCTION PROCUREMENT SERVICES

#### Why a Client May Need These Services

- ▶ To coordinate construction procurement without tying up in-house resources
- ▶ To obtain expert advice about selecting an appropriate project delivery method
- ▶ To obtain help in identifying qualified contractors
- ▶ To ensure that reasonable prices are obtained for construction work
- ▶ To assist in awarding and preparing contracts for construction

#### Knowledge and Skills Required

- ▶ Experience with managing construction procurement processes
- ▶ Knowledge of construction contracting approaches and procedures
- ▶ Understanding of project design intent, budget, and schedule
- ▶ Knowledge of construction drawings and specifications
- ▶ Strong communication and negotiation skills

#### Representative Process Tasks

- ▶ Assist client in selection of project delivery method
- ▶ Assemble construction procurement team, including cost estimator and attorney
- ▶ Identify prospective bidders
- ▶ Organize or participate in pre-bid conference
- ▶ Assist in preparation of bidding documents
- ▶ Review and evaluate competitive bids
- ▶ Assist client in contractor interviews for obtaining negotiated proposals
- ▶ Award contract for construction

▶ For discussion of two services closely related to construction procurement, see **Construction Documentation—Drawings and Construction Documentation—Specifications**

### *Bidding Assumptions*

In preparing bids, certain assumptions are made in the building industry:

- The owner can expect that the architect has exercised reasonable diligence, skill, and judgment in preparing the contract documents—so that the contractor complying with them will deliver a project adequate for its intended purpose.
- The contractor can expect that the information given in the construction documents is reliable and adequate to permit comprehensive and accurate bids.
- The contractor can expect that the architect knows local regulations concerning design and construction of the project and has indicated in the contract documents any known unusual conditions that are reasonably likely to affect cost.
- The architect is entitled to the owner's confidence that the architect is acting in the best interest of the project during selection of bidders and taking of bids.
- The owner can expect that a bidder will notify the architect immediately if submission of a bid will not be possible at the designated time and place and will withdraw from the bidding if necessary.
- The owner can expect that every contractor has bid in good faith and has available qualified supervisors to coordinate the work.
- Contractors can expect that the owner is soliciting, receiving, and evaluating all bids in good faith.

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On projects that are publicly funded or for some other reason heavily regulated (e.g., health care facilities that require state inspections or government procurements with minority-owned or women-owned business enterprise participation requirements), the need to comply with regulations motivates some clients to seek outside help with procurements. These clients are concerned about maintaining the quality of construction and complying with regulatory requirements while maintaining cost control.

Clients recognize the relationships between clear bid or proposal request documents, well-executed construction contracts, and a smoother and more effective construction administration process. The architect who designs the building and prepares the construction documents is especially well qualified to prepare bid/proposal packages and legal contracts, since the drawings and specifications are an integral part of both types of documents.

On the other hand, competitors in the market for construction procurement services argue that architects are not capable of independently reviewing their own work when they serve in the construction procurement or construction administration roles.

Firms specializing in program management or owner's project representation are capturing an increasing share of the construction procurement market. These firms position themselves as third-party neutral players who will manage and monitor the project on behalf of the owner, with the owner retaining the construction contract. The services of a program management firm often include project feasibility analyses, programming, design management, and advice on project delivery approach, as well as construction procurement, construction administration, and facility management. Typically these firms are staffed by a mix of design and construction professionals.

Besides architect-engineer and engineer-architect firms, other major providers of construction procurement services include firms specializing in construction management or design-build. Construction management firms manage construction contracts held by the owner. Design-build firms contract directly with the owner to provide design and construction services.

The market value of construction procurement services depends on the type of package offered. Adding construction procurement services to a traditional design contract generally adds 1 to 2 percent to the architect's fees for a project.

## SKILLS

Construction procurement services require a range of knowledge and skills, some of which are developed through practical experience in managing building design and construction and through previous experience in managing procurement processes. Senior architects with project management experience are most likely to have developed the negotiation skills and the knowledge of construction procedures required to negotiate procurements and draft construction contracts. Most architects possess other, more fundamental skills, including the ability to understand the design intent expressed in construction drawings and specifications and the ability to communicate with vendors and construction contractors.

Cost estimators usually work with the procurement team to assist with budget estimation. A good attorney well versed in construction law is another essential member of the construction procurement team.

The construction procurement team usually will coordinate closely with other professionals involved in the project—including site planners, landscape architects, architects, and civil, structural, mechanical, and electrical engineers—in order to be certain the procurement procedures and documents facilitate the design intent.

## PROCESS

Factors that can affect the scope of work for construction procurement include the contract structure (e.g., design-bid-build, design-build, etc.), the number of construction contracts, the timing for contract awards, and the use and extent of fast-tracking.

The basic steps involved in contract procurement include preparatory steps, prequalification of bidders, preparation of bidding documents, receipt of bids, and contract award.

## Preparatory Steps

Preparation for bidding and negotiation ideally starts at the very beginning of the project—in selecting the project delivery approach and in deciding how construction contracts will be structured, awarded, and paid.

**Contract structure.** Key preparatory decisions for contract structure include the following:

- Will construction be contracted separately or together with design services? If the latter approach (design-build) is selected, the construction contract includes design and usually is awarded early in project development.
- How many construction contracts will there be? Will there be a single general construction contract or multiple prime contracts? If there are to be multiple prime contracts, who will coordinate or manage them—the architect, the owner, a construction manager, or one of the contractors?
- When will the construction contract(s) be awarded—at one time, based on one set of construction documents, or at several times, with the project divided into a few, several, or even many bid packages?
- If the project is to be divided into bid packages, will it also be fast-tracked—that is, with early packages awarded before design of the later packages is complete?
- What will serve as the basis for establishing the contract sum for construction: a full set of construction documents or a less-developed set of documents, for example, scope documents or 50-percent-construction documents?
- What will be the architect's role during bidding, negotiation, and construction? Is the architect to administer the construction contract for the owner? Will there be a separate construction manager or program manager? Will the architect also serve as construction manager?

**Award system.** Related to delivery approach decisions is the issue of contract award. Will construction contracts be awarded directly (that is, by negotiation) or through competitive bidding? If there is competitive bidding, will it be open to all or restricted to an invited list?

**Contractor compensation.** Will compensation be fixed price, cost plus fee, unit prices, or some form of guaranteed maximum or incentive compensation?

**Timing.** If contracts will be negotiated, and if the owner is prepared to select a builder, it often makes sense to have that builder in place during the design phases. If bids are to be solicited from a restricted list, this list should be prepared as early as possible. It is sensible to assess the availability of the contractors on the list and the degree of competition the owner may foresee. If the project is to be openly bid, an assessment of probable market response may help establish the most appropriate timing of advertisement and bidding.

## Prequalification of Bidders

Prequalifying bidders by investigating their general reputation, financial integrity, demonstrated ability, quality of performance, and prior project experience can help ensure that appropriate standards are met. This option usually is open when there will be a restricted bidders list or open bidding for a project that does not include public funding. Depending on applicable law, it may be possible to prequalify contractors on public projects as well.

## Preparation of Bidding Documents

Having advised the owner on the types of contracts and on prospective bidders, the architect assembles bidding documents for the owner. These documents describe the project in detail and indicate the conditions under which it will be bid and built. The bidding documents usually include the following:

## Prequalification Checklist

Based on AIA Document A305, this checklist can aid in collecting the kind of information that should prove helpful in prequalifying contractors. Be sure to consider the questions carefully—especially in terms of what you plan to do with the answers. Will you be in a position to evaluate what you receive? Are you prepared to follow up with phone calls or reference checks to verify information?

1. Basic information: name, address, principal office, and type of business (corporation, partnership, individual, joint venture, other). A Dun & Bradstreet report may be desirable.
2. Length of time the organization has been in business as a general contractor and whether it has operated under other names. Businesses come and go, and rapid name changes may indicate instability.
3. For corporations: date of incorporation, state of incorporation, and officers' names. Is the corporation registered in the state in which the project is located?
4. For sole proprietorships and partnerships: date of organization and names and addresses of general and limited partners.
5. States and categories in which the organization is legally qualified to do business, indicating registration or license numbers, if applicable, and states in which the partnership or trade name is filed.
6. Types and percentages of work normally performed with the contractor's own forces. Low percentages suggest a smaller vested interest in the project.
7. Whether the organization—or one of its partners or officers as a partner or officer of another organization—has ever failed to complete any work awarded. Details are usually sought, and follow-up may be necessary.
8. List of major construction projects in progress, giving name of project, owner, architect, contract amount, percentage completed, and scheduled completion date. Following up with the architects of these projects may provide valuable insights.
9. List of construction projects completed in the last five years, giving name of project, owner, architect, initial and final contract amounts, date of completion, percentage of the cost of the work completed with the contractor's own forces, and number of requests for information and change orders. Visits to some of these projects may be in order.
10. Construction experience of the individuals being proposed to manage this project.
11. Trade and bank references. Follow-up may be in order.
12. Bonding company and name and address of agent. What is the organization's bonding capacity? How much of it is currently engaged? How much is tentatively outstanding? How much of the organization's current and committed work is not bonded?
13. Litigation history, including complaints, claims, demands for arbitration, and lawsuits brought by (and against) the organization in, say, the last five years.
14. Experience in partnering and alternative dispute resolution methods in, say, the past five years.
15. Lien history, including liens placed on projects as well as liens placed on the contractor by others.
16. Financial statement, audited if available, including the contractor's latest balance sheet and income statement.

- Advertisement or invitation to bid
- Instructions to bidders
- Bid forms
- Information on bid security or bond, if required
- Form of owner-contractor agreement
- Performance bond and labor and material payment bond, if required
- General and any supplementary conditions of the contract
- Drawings and specifications
- Any addenda issued prior to the receipt of bids

**Advertisement for bids.** For public work, the law usually requires an invitation to bidding to be announced in one or more newspapers. The client may choose supplemental advertisement in contractors' newsletters, magazines, or other media.

**Instruction to bidders.** AIA Document A701, Instructions to Bidders, contains provisions concerning definitions, bidder's representations, bidding procedures, examination of bidding documents, substitutions, qualifications of bidders, rejection of bids, and submission of post-bid information, including performance and payment bonds.

**Bid form.** The architect should be prepared to help the owner prepare the bid form so that all bids will be submitted in an identical format. Some owners require the use of their own forms.

**Bid documents.** Each bidder, including those bidding on only a portion of the work, should have access to at least one complete set of drawings and specifications. The number of sets furnished to general contractors bidding on the entire project generally

depends on the size of the project. To ensure the return of bid documents by unsuccessful bidders, each bidder can be required to provide a security deposit to be refunded (in whole or in part) upon return of the documents in good condition within a stated period.

**Registration of bidders.** The architect should maintain a master list with the name, address, and phone and fax numbers of contractors receiving bidding documents. This list is necessary for issuing addenda, tracking returned sets, and refunding deposits.

**Bid security.** Bid security—usually about 1 percent of the bid—warrants that the selected bidder will execute the construction contract and furnish a performance bond, if required, within a stipulated period.

**Owner-contractor agreement form.** The owner-contractor agreement sets forth the respective rights, duties, and obligations of these principals to the agreement and of the architect (and possibly a construction manager) acting to administer the construction contract. For bidders' information, the agreement form, as well as the general conditions and supplementary conditions of the contract for construction, are included in the project manual. This ensures that all the contract requirements are immediately available to each bidder.

**Performance bond.** A performance bond binds a surety company to complete the construction contract if the contractor defaults. Performance bonds are usually required for all public work and often for private work, except for small projects.

**Labor and material payment bond.** The performance bond and the labor and material payment bonds are usually written at the same time.

**Addenda.** During the bidding period, reviews of the drawings and specifications by prime bidders, sub-bidders, and material suppliers inevitably reveal items that must be clarified, corrected, or explained. Sometimes the owner or architect will initiate revisions in the bidding documents in response to changes in circumstances or requirements. Written addenda, including drawings or other graphic documents issued before execution of the contract, modify or interpret the bidding documents. Addenda become part of the contract documents when they are first issued; they are sent to all those who have received bidding documents. Addenda issued after bids are received are intended only for the selected bidder and may result in changes to the proposed contract price.

## Receipt of Bids

The construction procurement consultant usually conducts any public bid opening, unless the client prefers to do so. Observing proper protocol is important to avoid bid protests.

**Bidding results.** Final selection of the contractor is the owner's decision, made with the architect's assistance. When the qualifications and financial responsibility of the bidders have been determined in the prequalification process, the expectation is that the contract will be awarded to the lowest bidder. When bidders have not been prequalified, the expectation is that the contract will be awarded to the lowest *responsible* bidder.

**Errors, withdrawals, and revocations.** The bidding documents generally set a date after which bidders cannot withdraw bids. This date should allow sufficient time after submission of bids for accurate bid evaluation and authorization of an award.

**Evaluation of bids.** The architect will, in all likelihood, assist the owner in the selection decision by evaluating the bids or proposals received. This assistance usually includes review and recommendation on any alternatives and substitutions that the owner has solicited. This evaluation takes on special significance if all bids exceed the owner's bud-

### The Pre-Bid Conference

A pre-bid conference, held two or three weeks before bids are due, may be valuable for several reasons. It focuses potential bidders on the project, allows the architect to reiterate key points in the documents, and (if held at the site) gives bidders an opportunity to visit the site. An agenda might include the following items:

- The project background
- Confirmation of bid date and procedures
- Further explanation of alternates
- Identification of special issues or working conditions
- Any update on the post-bid schedule
- Questions and observations about the project from those attending

For the owner and architect, such a meeting provides one indication of contractor interest in the project. It may disclose questions or issues that require clarification or additional information—which are then included in a follow-up addendum. (Many architects report that they do not answer any such questions at the pre-bid conference, both to provide the time for a full answer and to be sure that all bidders receive the same answer.) On occasion the pre-bid conference may uncover a significant gap in the documents or bidding procedure—a gap that is much easier to address during bidding than after all proposals have been received.

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## Representations on the Bid Form

To underscore the importance of the contractor's representations as outlined in the bidding documents, some architects include these representations on the bid form. This is the language from the 1987 edition of AIA Document A701, Instructions to Bidders:

The bidder by making a bid represents that the following have taken place:

- The bidder has read and understands the bidding documents and the bid is made in accordance therewith.
- The bidder has read and understands the bidding or contract documents, to the extent that such documentation relates to the work for which the bid is submitted and to other portions of the project, if any, being bid concurrently or presently under construction.
- The bidder has visited the site, become familiar with local conditions under which the work is to be performed, and has correlated the bidder's personal observations with the requirements of the proposed contract documents.
- The bid is based upon the materials, equipment, and systems required by the bidding documents without exception.
- The bidder has studied and compared the bidding documents with each other and has reported to the architect any errors, inconsistencies, or ambiguities discovered.

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get. The owner's options at that point include increasing the budget, rebidding, renegotiating, revising the scope, or abandoning the project.

Rebidding without design changes should be approached carefully. It is of value only where market conditions are changing, so that a second round is likely to produce a significantly lower price. Redesign should be approached even more carefully. Design decisions usually are so intricately interwoven that it may be difficult to make a "few changes" and still maintain the integrity of the project design.

**Negotiation of bids.** Even in competitive bidding situations, it is not uncommon to engage in some negotiation after bids have been received. Minor changes required before the contract is signed should be negotiated only with the selected bidder, and then only when permitted by the owner or the awarding authority's regulations.

If major changes are necessary, they can be negotiated with the selected bidder, if authorized, or the original bids can be rejected and new bids requested based on revised drawings and specifications. Rebidding should occur only when other solutions are not practical.

**Rejection of bids.** The owner customarily includes in the bidding documents the right to reject any or all bids.

**Notification of bidders.** After the owner has selected the contractor(s), all bidders should be informed of the results, as a matter of courtesy.

## Contract Award

The construction procurement consultant prepares a contract reflecting modifications resulting from negotiations and changes. The owner and contractor(s) sign the agreement(s).

**Letter of intent.** When the owner wants to move forward immediately before assembling and executing a formal agreement, a written letter of intent may be used to give the successful contractor interim authorization to begin work. Such orders to proceed, while common, have legal implications and should be drafted by the owner's attorney for the owner's signature.

Usual documents and deliverables for construction procurement services are reports of bidding or proposal results; recommended actions; and construction contracts.

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The AIA provides a contract document designed especially for alternative architectural services.

**B102–2007, Standard Form of Agreement Between Owner and Architect without a Predefined Scope of Architect’s Services.**

AIA Document B102–2007 is a standard form of agreement between owner and architect that contains terms and conditions and compensation details. B102–2007 does not include a scope of architect’s services, which must be inserted in Article 1 or attached as an exhibit. Special terms and conditions that modify the agreement may be included in Article 8.

The separation of the scope of services from the owner/architect agreement allows users the freedom to append alternative scopes of services.

AIA Document B102–2007 replaces and serves the same purpose as AIA Document B141–1997 Part 1.

For more information about AIA Contract Documents, visit [www.aia.org/contractdocs/about](http://www.aia.org/contractdocs/about)

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