

Design-Build: An Owner Speaks

Excerpted and adapted from a *Cornerstone* article by David Frommer, AIA

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SUMMARY

Owners are constantly seeking more effective ways to develop facilities that add quality to building portfolios cost-effectively. To that end, many expand their capabilities to the procurement of design and construction services.

I have collaborated with several owners in design-build projects and planning initiatives as well as other project-delivery methods such as design-bid-build and design-construction manager at-risk (an architect working in close coordination with a construction manager acting as general contractor). Rather than discussing specific design-build projects, I want to focus on considerations that have come to the forefront during my experiences in design-build procurement.

FULLY INTEGRATED DESIGN-BUILD

Owners may consider the design-build delivery model for several reasons: design and cost control, project integration, risk management, single point of delivery, and cost and scope understandings early in the project process. In my work and experience in southern Nevada, owners generally choose contractor-led design-build, and architects typically do not serve as the prime contracting party.

Public-sector project budgets usually are either fixed or required to maintain a lowest-cost or best-value approach. Furthermore, in design-bid-build projects, owners may act as project integrator. This role can create disconnects between design documents and construction bids at the owner's risk—disconnects that are not always clear in terms of accountability.

Given these circumstances, design-build can be an appealing project delivery option. Design-build as a result of the partnership between the architect and contractor offers the owner a team for which clear and appropriate scope, performance, and prescriptive criteria have been set and that can deliver projects in a comprehensive fashion, allowing integrated project delivery.

PUBLIC PROJECT CRITERIA

Parties engaging in a public-sector design-build project should consider some important elements.

- **A review of legal and regulatory issues.** Study legislative or nonrestrictive funding and property conditions to verify that design-build is a permissible project delivery method.
- **Appropriateness of building type.** Owners must consider whether their building type lends itself to design-build. Design-build can be used for any building type, but an owner should consider which project delivery system is most appropriate and whether their organization can support the management and technical reviews required by complex design-build projects.



As this clinical space illustrates, design-build project RFPs must outline critical equipment needs to receive compliant design submittals.

- **Design-build procurement issues and supporting project elements.** A detailed procurement plan should be developed before entering into a design-build contract. The nature of design-build procurement, which can be quite complex, must be understood, as must the procurement and timing of all support project elements, both in formulating the design-build solicitation (e.g., specialty equipment, sole-source agreements) and in providing nonconstruction elements (e.g., special inspections, furniture, fixtures, equipment

packages). The need to identify special project features up front is heightened by the need to define the design-build project's parameters as clearly as possible in the solicitation phase.

- **The nature and capability of the owner's organization.** Design-build requires a significant investment of owner resources in solicitation development, project management, technical review, field review, and equipment coordination. The design-build project delivery model requires a different approach to, and relationship with, the building delivery team. The owner's staff must be able to participate in the design-build team in a manner different from design-bid-build teams. For example, in working with a guaranteed maximum price (GMP) design-build model, the relationship between the owner and the design-build firm requires a great deal of flexibility and joint interpretation of design needs and construction approaches during design completion to maintain quality and GMP considerations jointly.
- **The building official's capabilities and coordination.** Design-build may involve nontraditional approaches to design reviews, permits, and construction timing. Although these issues are not always unique to design-build and can be mitigated, design commitments that affect GMP often are made at the completion of the design-build selection process, many times prior to regulatory reviews. Impacts, reviews, changes, and responsibility based on planning and building department reviews must be considered in the project's timing and structure.
- **The nature of design-build solicitation.** Design-build solicitation can be conducted in a variety of ways. Basic questions include the nature of the project definition (performance versus prescriptive, or a combination), the proposal review criteria, integration of qualifications-based selection criteria, offering stipends, and the proposal's nature.
- **Understanding what defines a successful project.** This is a key issue for all projects, but in design-build it influences the nature of the design-build solicitation, the selection criteria, and the project development going forward. Different design-build processes allow owners to focus on different project success criteria, including cost, quality, quantity, and schedule.

THE ARCHITECT'S ROLE

While people may debate the merits of architect-led versus contractor-led design-build, in both models architects can provide a range of services that an owner values. Architects can serve as a consultant in developing the solicitation and request for proposals for the design-build procurement and develop performance and prescriptive information to help define the critical elements of the design-build scope and project criteria. In either prime scenario, architects are the project's key design professionals, providing the formal architecture and engineering services to design, permit, and build the project.

Design-build owners generally seek architects and other design professionals who can work in an integrated team environment and maintain a project perspective that is as objective as possible. Depending on the chosen architect role, design-build requires architects to define, design, administer, or deliver projects that meet scope, quality, cost, and schedule criteria.

Contractual arrangements for the architect-contractor relationship in contractor-led design-build must permit the architect to be an integrated part of the design-build team. They must also allow the architect to maintain as objective a role as possible to deliver a project that complies with clearly defined owner criteria, where design services are aligned with project definition. Owners expect architects to maintain their professional roles, perspectives, and duties in the interests of the project as well as to support project requirements that must be understood and addressed as objective project requirements.

Design-build demands a project relationship that is well defined and understood at the front end, with a relationship of trust between the owner and the parties in the design-build entity. It is incumbent on all parties in the design-build team to maintain an objective view of project elements, their character, team responsibilities, and where clarity does or does not exist as well as to work together to complete the project in an objective manner.

ABOUT THE CONTRIBUTOR

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RESOURCES

More Best Practices

The following AIA Best Practices provide additional information related to this topic:

- 12.03.02 How Roles Change in Design-Build
- 12.03.05 Making the Transition from Designer to Design-Builder
- 12.03.06 Partnering and Teaming Improve Design-Build Success

For More Information on This Topic

See also “Design-Build” by Ron Gupta, AIA, and Paul Doherty, AIA, *The Architect’s Handbook of Professional Practice*, 13th edition, Chapter 18, page 612, as well as “Design-Build Led by Architects” by Elena Marcheso Moreno in the *Update 2003* to the *Handbook*, page 31,



See also the 14th edition of the *Handbook*, which can be ordered from the AIA Bookstore by calling 800-242-3837 (option 4) or by email at bookstore@aia.org.



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Key Terms

- Leadership
- Disciplines
- Construction disciplines
- Design-build