WHAT IS DESIGN-BUILD?

A Design-Build Done Right Primer





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A DESIGN-BUILD DONE RIGHT PRIMER

A DESIGN-BUILD INSTITUTE OF AMERICA PUBLICATION

DESIGN-BUILD IS A SYSTEM OF PROJECT DELIVERY.

By <u>Project Delivery</u>, we mean a comprehensive process including planning, design and construction required to execute and complete a building facility or other type of project.

Within the construction industry there are a number of project delivery systems that owners may choose to complete their project. Design-build is one of those choices.

Over the past few decades, use of design-build in both private and public sectors has greatly accelerated in the United States, making design-build one of the most significant trends in design and construction today.

Among the project delivery systems that owners may choose are traditional design-bid-build, multiple-prime contractors, construction management at risk and design-build^{1, 2}. Choosing the right project delivery system is a critical part of the strategic acquisition plan every owner must develop when embarking on a new project. Owners can influence desired results from everyone involved by the way they strategically and proactively plan from the beginning of the project.

DESIGN-BUILD IS SOLE-SOURCE RESPONSIBILITY.

Design-build is where <u>one</u> entity, the design-builder, enters into a single contract with the owner to provide <u>both</u> design <u>and</u> construction services.

In all other project delivery systems, there are separate contracts for design and construction. The single contract for both design and construction is the design-build distinction.

A single contract changes everything.

With one design-build entity, the roles of designer and constructor are integrated. One entity drives one unified flow of work from initial concept through completion.

Streamlining project delivery through a single contract between the owner and the design-build team transforms the relationship between designers and builders into an alliance that fosters collaboration and teamwork. United from the onset of the project, an integrated team readily works to successfully complete a project faster, more cost effectively, and with optimized project quality.

Change orders and disputes are rare in well organized, performance-based design-build projects, because the sole-source responsibility of a single contract for both design and construction clearly places the responsibility for coordinating all project elements squarely in the hands of the design-build team.

By contrast, in all other systems of project delivery, the owner must manage two separate contracts, one for design and one for construction. (Or in the case of multiple-prime delivery, many contracts for construction).

In all other forms of project delivery, the owner becomes the middleperson and potentially becomes engaged in disputes between the designer and the contractor(s).

The frequency and intensity of those disputes are often exacerbated by the contractual nature of traditional design-bid-build project delivery.

Architects and engineers provide design services under the legal concept of a Standard of Care. They prepare plans and specifications to the best of their abilities, but do not warrant those documents to be perfect and free of human error.

The designer then presents the completed plans and specifications to the owner, who in turn, distributes those documents to the contracting industry in the form of an invitation for bids. The Spearin Doctrine is a legal concept that goes into effect when the owner requests bids from

ONE CONTRACT
FOR DESIGN AND CONSTRUCTION

Owner

Single Point
Responsibility

Contractor

1 For a more complete description of the features of the various project delivery systems available to owners, see DBIA's Design-Build Done Right! Primer on "Choosing a Project Delivery System" 2 "Integrated Project Delivery" or "IPD" refers to a contractual model where the owner, constructor, designer and potentially others enter into a single, multi-party contract. Although there have been relatively few projects delivered through the use of this multi-party model, the contract forms currently available anticipate that the owner, constructor and designer will enter into the same agreement, share some of the risks and rewards of the contract and potentially limit the liability among the parties. Due to the limited history of IPD, it is not included in the list of predominant project delivery systems.

contractors and eventually enters into a contract for construction of the project. Under the Spearin Doctrine, when the owners give the designer's documents to the contractor, they do so with an implied warranty of sufficiency; in essence, a promise by the owner that the plans and specifications contain information entirely sufficient for the contractor to bid and build the project.

In all other forms of project delivery, the owner is caught in the middle of a liability gap.

It is not uncommon under traditional forms of project delivery that the information provided is not sufficient to bid and build the project. When this happens, disputes,

claims and change orders are often the result, with the owner caught in the middle of the finger-pointing between the designer and the contractor.

With two contracts, the designer and contractor can easily blame one another for cost overruns and other problems.

The advantages of the single contract in the design-build model are many.

A single contract for both design and construction transfers the majority of responsibility for the completeness, accuracy and integration of the design and construction processes to the design-build entity. In design-build, the owner is no longer at the fulcrum of the liability gap between Standard of Care and the Spearin Doctrine.

Also, with the designers and constructors forming a unified, integrated team at the onset of the project, typically among parties that have an affinity for working together, the opportunity to actually coordinate and optimize the design effort with the construction effort is greatly enhanced over any other system of project delivery.

That is why a single contract for both design and construction is a distinctive feature of only the design-build system of delivery.

If there is more than one contract, it is not design-build.

DESIGN-BUILD IS ALSO A MINDSET.

As much as design-build is defined by a sole-source contract for design and construction services, design-build is also defined by the attitude of everyone involved in the project. In successful design-build projects, everyone makes the mental shift to think and act as a single entity.

Design-build is often compared to the concept of the Master Builder which existed in ancient times and into the Renaissance. Many of the great wonders of the world were created using this methodology. The Master Builder was not a contractor, an architect or an engineer. The Master Builder was the embodiment of all three disciplines. The Master Builder concept depicts the earliest model for delivering design and construction as an integrated service.

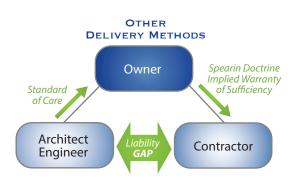
Toward the end of the Renaissance, design and construction began to separate. Individuals began to identify themselves as either designers or construction tradesmen. Guilds were formed. As the Industrial Age unfolded, specialization affected all aspects of Western culture. Professional associations and societies came into being, further defining the separation between architects, engineers and contractors. Specialization continued to support more segregated project delivery models throughout the nineteenth and early twentieth centuries.

Over the years, the design and construction industry degenerated from a culture of cooperation, teamwork, trust and mutual respect to one of fragmentation and inefficiency. There are many historical reasons this happened, but in the past few decades, many organizations are making efforts to restore the design and construction industry to its collaborative roots. Design-build has thrived because owners see the need for change in the way projects are delivered.

Design-build is intended to be a highly collaborative, fully integrated process that is built on trust, mutual respect, teamwork, innovation and creative problem solving. Design-build unleashes the power of team to deliver projects faster, better and for optimum cost — best value for the money, time and effort invested. Owners find that when design-build is done right, their level of engagement with the entire team is more meaningful than is experienced with other delivery methods.

Across the country and around the world, design-build successfully delivers both horizontal and vertical construction projects with superior results, no matter what the project type.

For additional information and resources, including award-winning design-build projects of all types from all over the nation and world, visit **www.dbia.org.**





DESIGN-BUILD DONE RIGHT

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