

The
Bridging Method
of construction project delivery



THE BRIDGING INSTITUTE OF AMERICA



The Bridging Method

The Bridging method is a proven construction project delivery method. Bridging is more effective in protecting the interests of the project owner than other methods. It places final design and construction responsibility on the contractor in a design-build form of contract. Unlike the typical design-build contract, however, the owner is fully protected from the outset with all aspects of the design and specifications that are important to the owner, yet the owner ends up having an agreement with the contractor to have a full design-build responsibility. The Owner's Design Consultant ("Bridging Architect") fully protects all aspects of the design and specifications which are important to the owner, while leaving proposing design-build contractors with the opportunity to use their skills and capabilities to provide the owner with the best total price and time of completion proposals.

The construction price under a properly executed Bridging project is not only as reliable for the Owner as a price based on final Contract Documents under the traditional Design-Bid-Build method, it is more dependable because the Owner's exposure to contractor-initiated change orders due to errors or omissions in the contract documents is dramatically reduced. All too often change orders cause significant increases in the final construction contract price. Bridging is worthy of consideration for any construction project as an efficient and effective method of project delivery, and will save time and money for the owner if properly carried out.

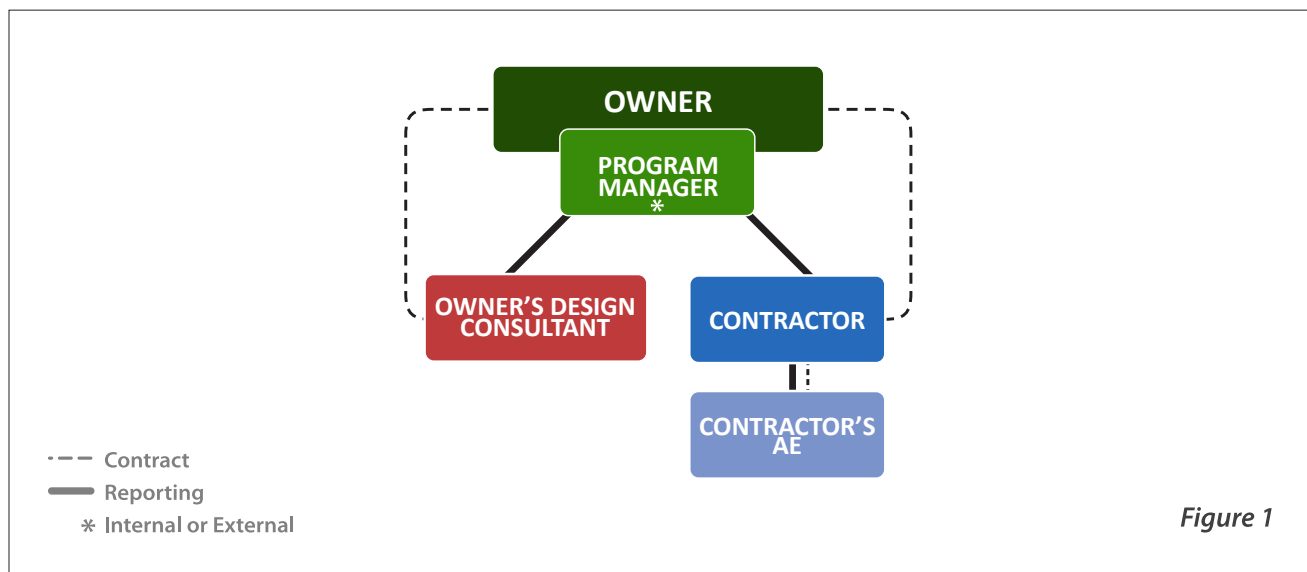


Figure 1

Bridging usually saves 4-5% or more in the contract prices and provides the owner with a fixed construction price in about half the normal time and at half the normal design cost. Bridging also dramatically reduces -

- Contractor-initiated change order costs.
- Claims against the owner.
- Delays/costs/disputes for fixing the ever present post-construction "bugs".

Construction also goes faster and smoother under Bridging, and project acceleration procedures work easily with this method.

Yet all of these advantages for the project owner are realized with Bridging without any loss of -

- Opportunity for creativity.
- Control of design.
- Control of design details.
- Quality of engineering.
- Quality of construction.

Posture of Construction Buyers: Relationship buying is clearly the best way to procure design and construction. In relationship buying the project delivery methods employed are not nearly as important as the relationships between the owner and the architects, engineers, program managers. Relationship buying can work very well for private sector owners who are constantly in the market for new construction with projects of a similar type in the same market areas. However, relationship buying can also be the worst and financially the most dangerous way of buying design and construction if the owner believes it can rely upon relationships when, in fact, that particular owner may not or should not. **Bridging works well for both types of owners.**

How the Bridging Method Works

Step 1: A designer or design team is selected as the Owner's Design Consultant ("ODC"), sometimes referred to as the "Bridging Architect" (Figure 1). The ODC goes through Schematic Design in the same way an architect would do in traditional design services, with reviews and approvals by the Owner. Typically, the project budget and schedule would also be reconfirmed at this point (Figure 2).

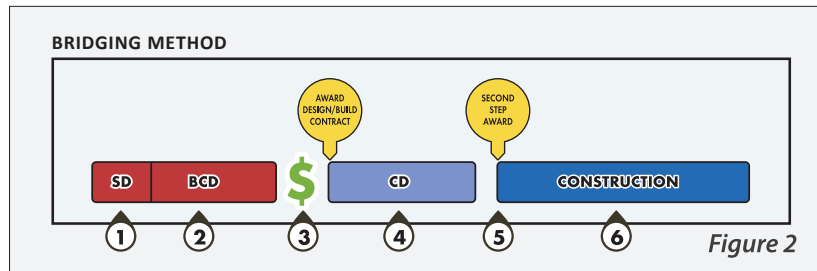


Figure 2

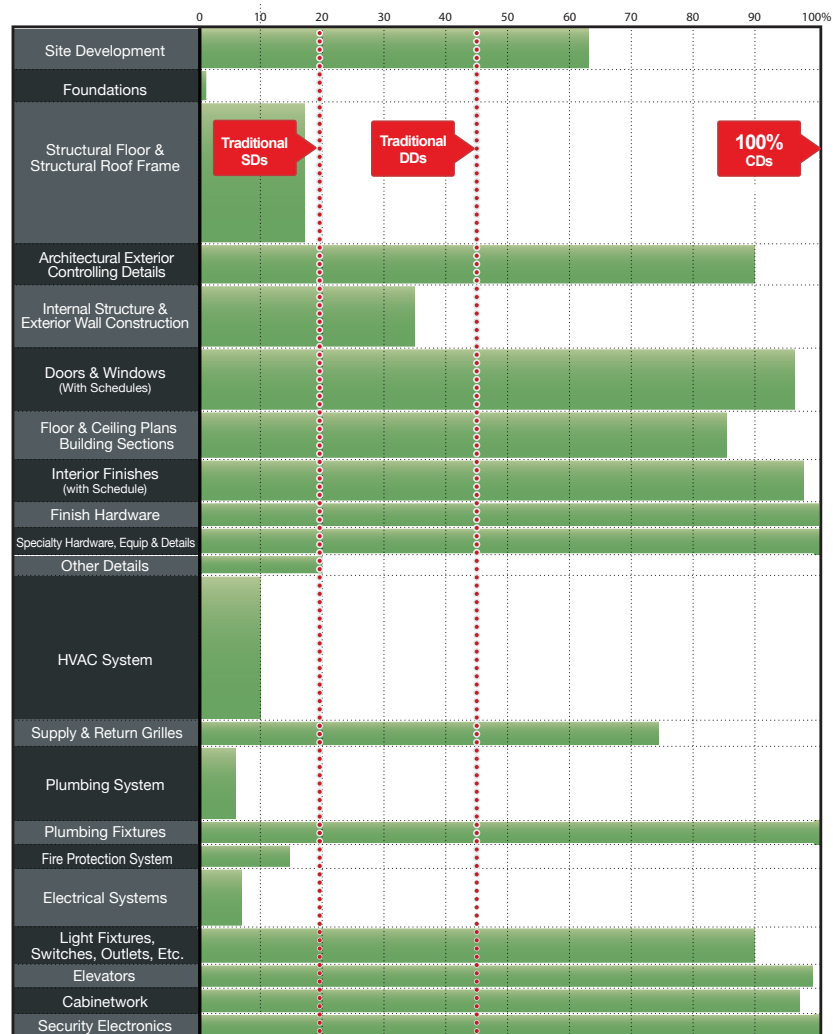
Step 2. At first glance the chart below (Figure 3) might seem to illustrate partially complete design. In fact, it illustrates very complete and advanced design and contract documents for the Owner's agreement with a Design Builder for a typical architectural Bridging method project. In this phase the ODC with its consulting engineers as well as the Program Manager (if there is one) prepares the Bridging Contract Documents ("BCDs"). While this will typically require about the same level of effort as the preparation of Design Development documents in the traditional Design-Bid-Build method, BCDs are quite different from "DD" documents. They will be much more complete in many aspects, usually the architectural, and much less complete in others, typically some elements of the engineering. However, if the BCDs are properly prepared following Bridging methodology, the construction contract provides highly dependable protection of the design intent and of the contract price. In Bridging this is achieved with a design-build type of contract as opposed to a traditional construction contract, though Bridging is not Design-Build in the way Design-Build is typically carried out. These Bridging Contract Documents must fully protect the design, the quality, and the Owner financially, while allowing the proposing contractor as much latitude as is prudent in order to receive the best proposal.

Step 3. The Owner can then receive competitive, fixed-price proposals based on the BCDs for the full project in a 2-step award contract. In this way the Contractor (who has its own architects/engineers by sub-contract or as employees) has the complete responsibility for both the construction and the final drawings and specifications and their being in compliance with the BCDs and for their completeness, accuracy and code compliance.

Step 4. If the Owner is now ready to proceed, the Owner would then authorize the preparation of Construction Documents ("CDs") by the Contractor and its AE. As this work proceeds the ODC will review these documents for compliance with the BCDs before authorizing payment.

Step 5. Upon proper completion of the CDs, the Owner may proceed with the construction or terminate the contract with the Contractor without cause by payment for the CDs. The CDs then belong to the Owner. If Owner chooses to proceed, construction is authorized.

Step 6. During the construction the ODC and Program Manager (if there is one) would also represent the Owner with on-site observation of the work, seeing that construction is in compliance with both the CDs and the BCDs, authorizing the monthly progress payments and final payment to the Contractor.



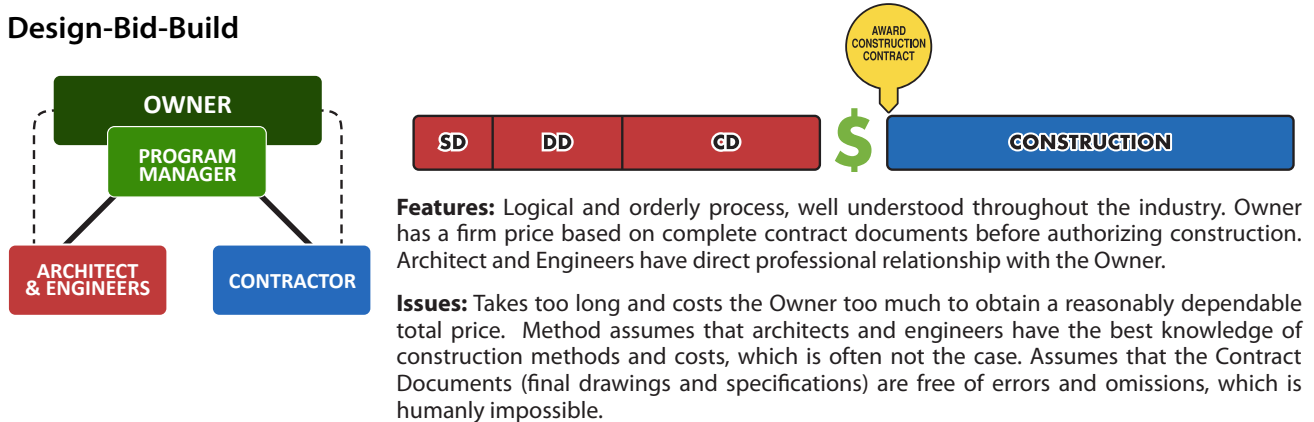
Typical levels of effort in the preparation of the Design Guide Illustrations (drawings) and Owner's Minimum Requirements (specs) comprising Bridging Contract Documents, as shown in green.

Figure 3

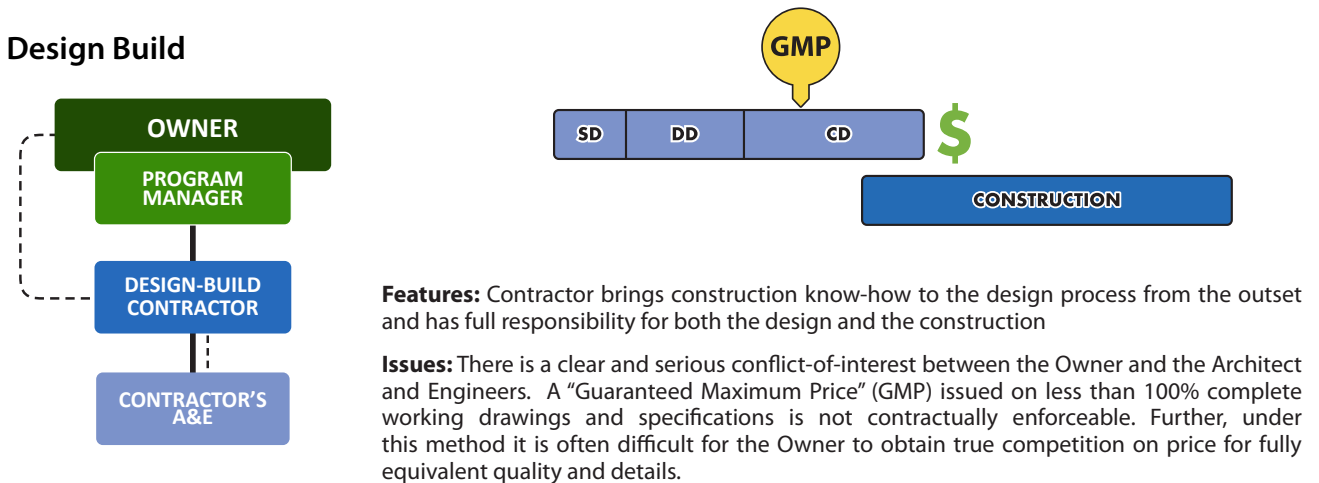
Other Delivery Methods

Bridging solves problems that owners often encounter with the three most commonly used project delivery methods ("Design-Bid-Build", "Design-Build" and "CM-at-Risk"). While all three of these methods have attractive aspects, they each have issues in terms of protecting the best interests of the Owner. The features and issues of each are discussed below.

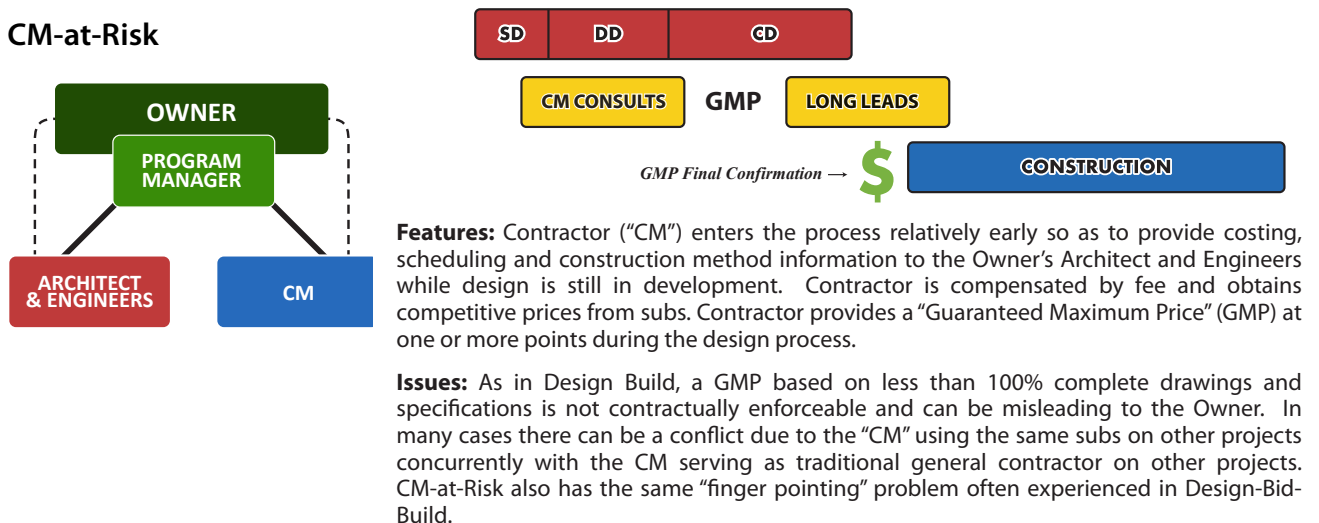
Design-Bid-Build



Design Build



CM-at-Risk



For more information on the Bridging Method and a detailed paper on the Bridging Method visit www.BridgingInstitute.com

Follow BIA on

