I have long been an advocate for the design-build project delivery approach as design-build has produced some of the best and most innovative projects RMH has ever done. Design-build accomplishes this by combining design and construction entities into a collaborative team dedicated to finding innovative ways to meet owners’ project needs. However, the landscape of design-build is quickly becoming a very risky model for the architect and engineer as well as the design-builder and trade contractors involved.

**Design-Build Process Overview**

In design-build, the design and construction of a project is put under a single entity known as the design-builder. Most commonly a general contractor takes the lead and hires architects and engineers to perform the design tasks. The owner of the project develops requirements for the project through either a detailed performance criteria document defining project needs, or sometimes through bridging documents. Through this process the owner is able to shift a significant portion of the risk of ambiguities and conflicts to the design-build team.

**Design-Build Issues**

Problems can arise when:

- Either the owner, the design-builder, or the design-build team members are unfamiliar with the process and fall into their traditional roles in design-bid-build where the parties may be adversarial and not cooperative.
- Owners can produce ambiguous RFP documents, bridging documents full of errors, or documents that do not adequately convey the desired concept
- Design-builders can be overly aggressive in their bid pricing or expect the design to be “perfect” even though it is only partially complete at the time of bid.

Lately, disputes between designers and constructors on the design-build team are becoming more common. As part of the proposal process, designers often come up with very preliminary concepts for the contractor(s) to “price” in order to develop a bid for the project, which is often a fixed-price lump sum bid. These preliminary designs are incomplete and, by their nature, do not include the detail required of bid-quality documents. However, the contractor often assumes they can rely on the designer’s preliminary design for 100% pricing, or insist the subcontractors “work it out” with the designers. Owners traditionally would be in the middle of the conflict in a design-bid-build project, but with design-build, this risk is shifted entirely to the design-build team.

**Designer Liability**

For the designer, this risk often manifests itself in demands by the design-builder or trade subcontractors to design within budget. If the design-builder or subcontractors determine the current design is over budget, the contractors force the design team to redesign until the project is within budget. Often this is done through a series of iterations called value engineering or “VE” exercises. The designer can end up far exceeding his fee by redesigning the project continually until the project is built.

This is becoming what I consider to be a crisis in the design-build delivery model that could make the process so risky that top design firms will opt-out of the design-build delivery method. Designer liability has become a big enough issue in large transportation projects that DBIA held a forum at their 2018 national conference in New Orleans dedicated to designer liability in design-build. This forum acknowledged that designer liability in large transportation projects has become a major risk for those teams, and an emerging problem in the vertical building construction segment as well.

**Possible Solutions**

If design-build is going to succeed as a delivery method, the problems of risk allocation; adequate contingency for design development; adequate time to produce designs; fair and balanced contracts; knowledgeable participants; and, cooperation between team members must be addressed. If not, designers will be unwilling to participate in what could be the riskiest project delivery method they have ever experienced.

www.ccdmag.com | news@ccdmag.com