

Procurement Process for Design-Build Innovation

Design-build continues to gain traction as a preferred method for delivering transportation projects that have high stakeholder appeal but limited budgets. For the Missouri Department of Transportation, a new design-build procurement process—unique because of the freedom it gave proposers to draw from project-specific best practices from around the nation—allowed the agency to deliver a high-profile bridge for much less than would have been possible through traditional procurement methods. MoDOT will use this new process, which is outlined below, for appropriate projects in the future.

1 Identify Project or Program

Identified funding and legislative impacts of decisions made.

2 Set Project or Program Goals

To help develop budget, schedule and scope goals for kclCON, MoDOT and the design-build team began the goal-setting process, analyzing how potential goals would affect the project outcome.

3 Prioritize Goals

A workshop was held to place the kclCON goals in priority order, and to discuss the impact of these placements along the way.

6 Complete Pre-Procurement Planning

- **RFP development**
Experts in geotechnical, roadway, bridges, aviation, hydraulics and hydrology, environmental, urban design and architecture provided expertise into the RFP development.
- **Subsurface utility investigations**
HNTB and its subconsultant identified area utilities and managed the as-built information.
- **Field survey**
HNTB and its subconsultant conducted field surveys.
- **Preliminary cost estimating**
From impact analysis of decisions made to alternatives analysis on trade-off discussions, HNTB provided information to facilitate decisions and ensure a timely and efficient process.
- **Right-of-way identification and facilitation**
HNTB and its subconsultants supported right-of-way acquisition activities, including identifying right-of-way needs, developing plats and surveying.
- **Third-party agreements**
Close collaboration with agencies including the Corps of Engineers, the Coast Guard, the Federal Aviation Administration, railroads and municipalities helped achieve timely turnaround of permits and agreements associated with the project.
- **Procurement process**
Issuing a request for qualifications and developing a short list of responders immediately preceded issuance of the draft request for proposals and the industry review.

5 Allocate/Mitigate Risk

Risk allocation discussions were held to determine which risk elements would be transferred to the contractor, which the owner would keep and which would be shared. Analysis was provided on how those allocations would impact owner contingency versus how they would impact contractor bids to determine the appropriate course of action. Elements the owner would keep were mitigated prior to procurement.

4 Identify Risk

For kclCON, HNTB's knowledge of local conditions and how those conditions could impact the design-build project helped identify risk elements, which included permits, third-party agreements, geotechnical conditions and environmental issues.

7 Implement the Procurement Process

- **Final RFP issued**
- **Technical proposal discussions take place**
HNTB added value by participating in request for information reviews, reviewing alternative technical proposals, responding to the industry and providing feedback from subject-matter experts.
- **Final proposals submitted**
- **Contractor selected and contract awarded**

8 Manage the Program Post-Award

After the design-build contractor was under contract, HNTB provided subject matter expertise in design reviews, contract management, third-party coordination, public involvement and construction management to ensure that MoDOT received a quality project, on time and on budget.