

# Design-Build Contracting

- Learn how to save time and reduce costs by properly implementing a Design-Build program.
- Gain an understanding of the contract administration differences between DB and DBB projects.
- Learn how to create and properly coordinate a DB schedule that integrates design, administrative, logistic and production activities.
- Develop skills in RFP preparation and proposal evaluation.

## Purpose and Background:

In the last decade, the Design-Build (DB) method of contracting has been increasing steadily. Since 1982, the volume of domestic DB contracts has grown from \$6 billion to \$56 billion and now represents 23 percent of the non-residential U.S. market. Both private and public owners are using this method to accrue savings in both costs and time by streamlining the project delivery process. The Department of Defense Nonappropriated Fund projects showed savings of 18% in costs and 14% in time (DBIA, 1996). A Florida DOT study found that DB projects change order costs were reduced to only 1.99% of award cost compared to DBB cost growth of 8.78%. The study also showed that average DB construction time was 21.1% shorter, and most strikingly, actual DB procurement times (i.e. from concept to turnover) were 54% shorter than conventional projects. To achieve these returns, the DB project concept must be well developed, and the design process must be totally coordinated with the construction. This seminar will help you to understand the dynamics of this innovative process and will impart the technical management skills you will need to capitalize on DB's potential.

This seminar breaks down the DB decision-making process into its component steps and reassembles it into a straightforward, logical methodology for the development of DB projects from the owner's standpoint. The seminar will alternate between lecture/discussion periods and short, high-impact team exercises which are designed to reinforce the preceding lecture's learning objectives.

The following major topics will be covered in this seminar:

❖ **DB risk versus DBB risk:** Participants will assess the exposure the owner has to typical types of risk inherent to the design/construction process. Through discussion and evaluation, seminar attendees will develop an understanding of differences in contract administration practices that must be made to implement DB as a project delivery method.

❖ **Scoping the DB project in functional terms:** The idea that DB allows the owner to compete innovative design solutions will be introduced. Participants will learn to develop a project requirements description in functional terms that permits industry to propose creative design solutions without a loss in owner control over the form of the final product.

❖ **DB evaluation planning:** Before an RFP can be written, the owner's representative must know how proposals will be evaluated to ensure that the right combination of information and technical data is requested from potential DB contractors. The concept of optimizing the combination of cost, time, qualifications, and quality will be shown to provide participants with a model from which to develop realistic DB proposal evaluation plans.

❖ **DB RFP preparation:** The pieces of the DB RFP will be covered in detail, and participants will learn to correlate the project scope and the evaluation plan to write an unambiguous RFP.

## Who Should Attend:

This course is designed for engineers and architects who represent owners wishing to procure a project using Design-Build. It is also effective for those large public and private owners who have in-house technical expertise and contract for their own design and construction services. While this course is designed for owners, construction managers, contractors and attorneys may also benefit from this seminar.

## Seminar Benefits

- ❖ Learn to select projects that will potentially benefit from a DB delivery.
- ❖ Find out how to optimize the balance between performance specified requirements and method specified requirements.
- ❖ Avoid costly and time-consuming errors due to poorly written DB RFP's.
- ❖ Understand the complex relationships between design and construction on a fast-track project.
- ❖ Learn how to accrue both time and cost savings by properly implementing a DB program.

## Instructors:

**DOUGLAS D. GRANSBERG, P.E., C.C.E.**, as an Associate Professor at University of Oklahoma. He recently joined the faculty of the University of Oklahoma after spending five years on the College of Engineering faculty at Texas Tech University. Before joining Texas Tech, he spent over twenty years in the U.S. Army Corps of Engineers. In his last assignment, he was the Europe District's Area Engineer in Ankara, Turkey where he was responsible for nearly \$200 million worth of contracts in several different countries. He pioneered the use of Design-Build contracting procedures to deliver facilities in remote locations in Turkey and Central Asia. He also owns his own private consulting business and has contracts to provide various construction management services including Design-Build to a number of US construction companies, and international construction and engineering firm, the Army Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), several cities and Fannie Mae. He is currently providing Design-Build consulting services on several projects in Turkey and the U.S. Consequently, he brings both the contractor's and the owner's perspective of Design-Build contracting to this seminar. Additionally, he has a number of research contracts with the Texas Department of Transportation including one where he wrote the Design-Build specifications and policy documents for future implementation by TxDOT. He has delivered various versions of this seminar in-house to USACE, NAVFAC, and the Washington Area Metro Transit Authority. He is a member of ASCE, the DBIA, and AACE, International.

**JAMES E. KOCH, PH.D.**, PE is an Associate Professor and Director of the University of Missouri-Rolla Lemay Center for Composites Technology. Before joining UMR, he completed a successful career in the U.S. Army Corps of Engineers, retiring in 1998. He has done Design-Build work on Army and Air Force projects in Saudi Arabia, Panama, El Salvador, Ecuador and the United States. His Design-Build experience goes back to the early 1980s with work on river projects along the Ohio and Kentucky rivers. Besides his research and technology transfer work, he is currently consulting with on a multimillion-dollar Design-Build housing development project in Chesterfield, MO. He is also a member of the Board of Directors of Zavrados Engineering and Surveying.

## Summary Outline:

### Day 1

8:30 – 9:30

**Introduction to Design-Build**

9:30 – 10:30

**Scoping the Project**

10:30 – 11:30

**Project Scope Practical Exercise (PE)**

11:30–12:00

**Discussion of PE**

1:00 – 2:30

**Preparing DB evaluation plans**

2:30 – 4:00

**Evaluation Plan PE**

4:00 – 4:30

**Discussion of PE**

### Day 2

8:30 – 10:30

**Preparing DB RFP's**

10:30 – 12:00

**RFP preparation PE**

1:00 – 1:30

**Discussion of PE**

1:30 – 2:30

**Scheduling DB projects**

2:30 – 3:00

**DB Scheduling PE**

3:00 – 3:30

**Discussion of PE**

3:30 – 4:00

**DB Fast-Track Issues**

4:00 – 4:30

**Summary and closing remarks**