

## CHAPTER 8

### ‘DO’ PHASE – DESIGN-BUILD METHOD

8-1. General. [ER 1180-1-9 Design-Build Contracting](#) prescribes procedures for use of the design-build project delivery method. The regulation stipulates the traditional design-bid-build method or, with limits, the non-traditional design-build (D-B) method may be used for project delivery, as appropriate. With the D-B method, the contractor provides integrated design and construction services. USACE performs quality assurance. This chapter prescribes quality management provisions for the design-build method.

8-2. D-B Contractor Responsibilities. With D-B the contractor is the single point of responsibility for the design and construction services. The PDT is responsible for the quality of the design performance criteria in the D-B solicitation. The D-B contractor is otherwise responsible for design quality. The PDT will ensure that appropriate design quality control provisions are included in the D-B contract. PDTs should refer to D-B contracting guidance at <http://www.hnd.usace.army.mil/techinfo/support.htm>. Contract provisions relating to design responsibility and quality include, but are not limited to:

a. Design Phase.

(1) Higher Standard of Care. Compared to an A-E contract, the D-B Contractor and its Designer of Record (DOR) are charged with a higher standard of care to correct construction associated with faulty design.

(2) Contractor’s Design Input. The contract will have provisions for the contractor’s construction function to provide input during the design. The D-B Contractor’s construction function will address constructability, coordination, and ensure that the project cost is within the contract budget/price amount.

(3) Warranty of Design. The D-B contract will include “Warranty of Design” provisions that provide for an extended callback for design errors and omission, and for correction of construction related to faulty design

(4) Quality Control. The D-B contract will address QC for design and design related activities during construction. The UFGS Section, Contractor Quality Control, has tailoring options to require the D-B Contractor to implement design quality control and is available in the SpecsIntact format. As a minimum, the design QCP must designate a qualified design quality control manager, incorporate independent, peer reviews, utilize a design deficiency tracking system and develop procedures for design reviews and for DOR reviewed and approved construction submittals.

(5) Design Submittals. The contract will address the requirements for D-B Contractor prepared design submittals. The contract will allow the D-B Contractor to package the design to fit the overall schedule. Within limits, the contract will also indicate when staged submittals are required before construction start for USACE review to ensure the design

meets the contract requirements. The contract will establish minimum format and content requirements for staged submittals and define the PDT's design review role. It will also require the use of DrChecks<sup>sm</sup> and RMS for tracking comments and submittals respectively.

b. Build Phase.

(1) DOR Quality Role. The D-B Contractor, through its DOR, will ensure the project construction is in accordance with the accepted design and the contract. The DOR's quality role during construction includes, but is not limited to, reviewing and approving shop drawings, correcting design errors and omissions, revising the design for official changes and approved deviations, resolving field questions or problems and approving final as-built drawings.

(2) Construction Submittals. The D-B contract will require the Contractor's DOR to assume the PDT's traditional role of technical review and approval of construction submittals. The DOR will review and approve proposed changes to the accepted design and forward them to the PDT for review. The UFGS Section, Submittal Procedures, addresses requirements for D-B contracts and is available in the SpecsIntact format.

(3) As-Built Documentation. The D-B contract will require the Contractor's DOR to review, sign and stamp as-built documentation. The D-B Contractor will prepare as-built drawings in the specified electronic format, and the drawings will be a closeout submittal for the end user.

(4) Value Engineering. Formal value engineering will normally only be conducted during the build phase, and not during the design phase. The D-B contract may include a clause that allows the D-B Contractor to submit value engineering change proposals (VECP). During the build phase the contract will have been awarded based on performance and prescriptive requirements of the D-B request for proposal. Since the performance requirements of the Request for Proposal (RFP) are considered essential and form the basis for evaluating the proposal, only the prescriptive requirements can be changed through value engineering change proposals (VECP), and only as long as the essential functions defined by those requirements remain unimpaired. Further, if the VECP affects an evaluation factor that was used to determine the award, the PDT will not accept it.

8-3. Project Delivery Team (PDT) Responsibilities. The Project Delivery Team's role for a D-B project is one primarily of quality assurance. [ER 1180-1-9](#) requires that USACE Districts develop formal design-build procedures to be approved by their Regional Headquarters. The PDT will follow the District's approved D-B procedures in the performance of its work. It is expected that PDT responsibilities for D-B will include, but not be limited to the following:

a. Request for Proposal (RFP) Phase. The PDT will develop and provide quality control review of the performance criteria and prescriptive requirements in the RFP. The PDT will review and evaluate D-B proposals for compliance with the contract requirements.

b. Design Phase. The PDT will perform quality assurance review of the D-B Contractor's design submittals. The review will be for general conformity with the design performance criteria and prescriptive requirements, and will not be in-depth, such as checking all design calculations.

c. Construction Phase. The PDT remains responsible for the quality of the design criteria and for assuring that the construction conforms to the accepted design as well as to the contract requirements. The PDT's role is that of quality oversight by concurrence of the DOR and contract quality control activities, including spot-checking submittals to ensure that they conform to the contract and accepted design. The PDT will also review value engineering change proposals. In order to not jeopardize or otherwise relieve the D-B Contractor of its single point of responsibility, the PDT will not overstep its QA role by directing or suggesting specific fixes or by approving design submittals, shop drawings and other submittals. The PDT will provide QA of as-built drawings.

d. Performance Appraisal. The PDT will evaluate the D-B Contractor's quality of performance, using the USACE Construction Contractor Appraisal Support System ("CCASS"). Inasmuch as past performance and previous experience have become effective evaluation factors in source and A-E selections, the PDT will record design performance on the D-B contract in the CCASS evaluation system. The PDT will include evaluation ratings and remarks regarding the design performance by the D-B Contractor or by a design subcontractor within the CCASS rating of the D-B Contractor.