

CHAPTER 6. PRECONSTRUCTION ADMINISTRATION

6.1 General.

This chapter covers the functions and responsibilities of the Resident Engineer Office and Construction Directorate on construction projects prior to award, and after award during the Limited Notice to Proceed (LNTP) period, but before the contractor's full Notice to Proceed (NTP).

6.2 Biddability, Constructability, and Operability (BCO).

a. General. BCO reviews serve to reduce costly, time-consuming modifications to the construction contract by eliminating design problems before construction begins. BCO reviews take place at 35% design completion and at 100% completion. The first review provides the construction team with an early look (familiarity) at what they will construct; the 100% review (which occurs at least 30 days before advertising for bids) is a comprehensive quality control perusal. Either step provides the review team an opportunity to incorporate lessons learned. Biddability reviews address whether any contractor can respond to the Request for Proposal and formulate a bid. The constructability portion of a BCO involves whether the facility can be constructed at all and can be built within the prescribed time limit. The operability review addresses whether the facility as designed meets the prescribed function of the program. The Construction Directorate performs BCO reviews. As stated earlier, the Resident Engineer is organizationally assigned to this Directorate. The RE staff has extensive knowledge of the construction market place and has experience in construction control, supervision, and management. Therefore, during the BCO review process the Resident Office provides an independent, non-designer, construction-oriented point of view on contract specifications and drawings. The end product of a BCO review is a good set of contract specifications and drawings that accurately reflect the requirements of the work to be performed. It is evident from past projects that problems occur in construction when poor designs are provided for bid and construction. These problems very often result in cost escalation and time delays and are legally corrected by change orders and modifications to the contract.

b. Review Process. ER 415-1-11 requires the BCO review. The BCO review team consists of the Resident Engineer and other Construction Directorate personnel and Engineering Directorate personnel. All reviewers receive Copies of the plans and specifications to review simultaneously. All review comments should either be incorporated into updates of the contract documents or, after adequate discussion, withdrawn by the reviewers making the comment. At the end of the review, the Director, Construction Directorate, and Director, Engineering Directorate will certify in writing that all appropriate BCO review comments were incorporated in the proposed solicitation document in accordance with ER 415-1-11.

c. 35% Review. The Resident Engineer and his or her office staff must ensure that the contract documents include the following:

- (1) Accurate depiction of site conditions and restrictions such as access, utility availability, drainage, storage, existing underground utilities, and general layout.
- (2) Adaptation of design structures and features to site conditions and constraints.

(3) A method or procedure by which design comments are documented and coordinated through the Chemical Demilitarization Facility Design Project Manager for both incorporation into the design through the AE, and incorporation into the Chemical Demilitarization programmatic lessons learned data base for consideration in designs of future facilities.

d. Final Review. This review is a quality control review. All review comments from the first review will be incorporated in the final drawings and specifications package. Any design features included since the first review are examined for coordination with the entire design. It is this review that prevents early modifications to the contract. The following items should be considered in the final review:

(1) Appropriateness of contract sequencing and relationship to other work, contract performance time, construction quality control (CQC), submittal requirements and network analysis system (NAS) provisions for the specific project in accordance with ER 1180-1-6, Construction Quality Management, ER 1-1-11 Network Analysis System, and ER 415-1-10, Contractor Submittal Procedures.

(2) Adequacy of space and access for all site contractors and government operations as well as provisions for coordination to preclude onsite operational conflicts.

(3) Coverage, clarity, and consistency of specifications.

(4) Clarity, simplicity, and essentialness of items on the bid schedule.

(5) Availability of local and special materials and labor skills.

(6) Special project configurations, design features, equipment phasing, and long lead-time requirements.

(7) Comparative economy of selected materials and structural systems to others available in the area.

(8) Inclusion of all benchmarks and baselines.

(9) Adequacy of O&M manuals, training procedures, and warranty clauses.

e. The Resident Engineer, in analyzing plans and specifications during the final BCO review, may request that a written work schedule be included in contracts where existing facilities will be enlarged, where construction is complex, or where work areas overlap. The requirement for a contractor to provide a written work schedule and to attend frequent post-award coordination meetings with all affected parties is a helpful management tools.

6.3 Considerations Prior to Award.

Solicitation documents encourage visits by prospective bidders/proposers on every construction project. A point of contact from the Engineering Directorate or at the Resident Office will be named in the solicitation for interested contractors to make a site visit appointment. A resident office representative

conducts the visits, assures that all visitors get the same information, and that the technical point of contact given in the solicitation document is advised of any special information provided during the visit. It is the responsibility of the contractor to visit the site if (s)he has questions regarding existing conditions. All solicitations are normally prefaced by the statement that it is the bidder's responsibility to verify all conditions, as provided in the solicitation documents. Questions regarding the interpretation of drawings and specifications, the request for proposal, or the invitation for bids must be requested in writing. Huntsville Center must then allow sufficient time for a reply to reach all bidders/proposers.

6.4 Award. The contracting office prepares the contract documents and mails or delivers them directly to the contractor. An authenticated copy of the contract is furnished to the Resident Engineer, who then issues a letter to the contractor providing guidance on contract and administrative items such as arrangements for the pre-construction conference, material submittals, safety, CQC, payrolls, shop drawings, or correspondence. At this time the Resident Engineer should verify that the work site is ready for construction to start.

6.5 Performance and Payment Bonds. Within five calendar days after the prescribed forms are presented to the offeror for signature acknowledging acceptance, the RE will execute a written contract. Two bonds, each with good and sufficient surety or sureties acceptable to the Government, must be delivered to the Government. The two bonds are a performance bond (Standard Form 25) and a payment bond (Standard Form 25-A). The penal sum of such bonds will be as follows:

a. Performance bond. The penal sum of the performance bond will equal 100 percent of the price of Phases II, III, and IV.

b. Payment bond.

(1) When Phases II, III, and IV are \$1,000,000 or less, the penal sum will be 50 percent of the contract price.

(2) When Phases II, III, and IV are more than \$1,000,000 but not more than \$5,000,000, the penal sum will be 40 percent of the contract price.

(3) When Phases II, III, and IV are more than \$5,000,000, the penal sum will be \$2,500,000. The contractor will furnish bonds to the Government prior to starting the contract.

6.6 Document Control. The Systems Contractor (SC) will set up a data control center for collecting, storing, retrieving, and disseminating all project-generated data, as well as any other documents determined to be useful to the program. The onsite data control center (DCC) will begin operation within 60 calendar days after contract award and be accessible by all government and SC personnel. The DCC will serve as technical library, vendor data library, and an operations data library for data generated by the data acquisition and evaluation system. For further guidance, see section C of the contract documents.

6.7 Mobilization and Orientation Limitations (Limited Notice to Proceed).

a. The SC and its subcontractors will not begin any construction or equipment installation (CLIN's 0003

and 0004) during the Limited NTP period (___ calendar days) except as described in section C of the contract documents (and its subparagraphs). This ___-day period is intended to provide the SC with planning and preparation time for preparing necessary documentation, such as the NAS, the Emergency Response Plan, etc., which are required for delivery to the Government within ___ calendar days after contract award; for mobilizing the work force; and for finalizing subcontract arrangements/purchase orders. Mobilization and orientation will include moving onto the site all materials and equipment, furnishing and erecting temporary buildings, and other construction facilities as required for the proper performance and completion of the work.

6.8 Plans and Procedures. See section C and applicable data items descriptions (DID).

6.9 Partnering - Government and Contractors. The concept of partnering involves developing a cooperative management team with key players from all organizations involved in the construction contract. The partnering concept is a team relationship that promotes the achievement of mutually beneficial goals and develops processes to keep the team working toward those goals. Mainly, partnering lessens the communication gap and maintains trust among teams during large, complex, long-term construction projects. The primary objective is to draw on the strengths of each organization in an effort to achieve a quality project the first time, within budget, and on schedule.

In an effort to more effectively accomplish this contract, the Government proposes to participate in a partnering concept with the SC and his subcontractors. This effort will be bilateral, and participation will be totally voluntary. Any costs associated with effecting this partnering effort will be agreed to and will be shared equally by all parties with no change in contract price. Accordingly, the SC will not include costs associated with this partnering effort as part of his contract, nor will such costs be allowable under the contract.

This partnering effort conveys no legally enforceable rights or duties; any changes to the contract must be made by the PCO under the terms of the written contract. This partnering effort will be governed by the principles and procedures set forth in IWR Pamphlet-910ADR-P-4 (provided in section J of the contract).

6.10 Notice to Proceed and Starting Work.

a. Notice to proceed.

(1) After the Contracting Officer receives the properly executed documents from the successful bidder, the CO issues the NTP and sends a copy to the Resident Engineer. Most often, the NTP will be delivered by certified mail, return receipt requested. The first day of the contract is the day **following** acknowledgment by the contractor of NTP receipt.

(2) Normally, the contract requires completion of all work within a given number of calendar days after NTP. In some cases, the contract establishes a firm completion date with a provision that if the NTP is received after a certain date, the completion date will be adjusted. In these cases, the adjusted completion date is spelled out in the contract in such a way that it is automatically established and does not require a contract modification.

b. Begin work. After the contractor acknowledges receipt of the NTP, the contract generally requires work to commence within a minimum number of days as required in FAR clause 52.212-3. For the record, the Resident Engineer informs the Construction Directorate, in writing, of the date on which the contractor begins work at the job site. If the contractor fails to commence the work, the Resident Engineer immediately files a report giving all essential facts to the Contracting Officer.

6.11 Post-award Orientation. Pre-construction and pre-work conferences are outlined in chapter 7, section 11 of this manual.

6.12 Federal, State, and Local Regulations.

a. The Resident Engineer is aware of using service/using agency, Federal, State, and local regulations required under the terms of the contract. These regulations are enforced by the Resident Office staff and must be obeyed by all contractor personnel over which the Resident Office has jurisdiction.

b. The contractor is responsible for conforming to all state and local laws and Federal regulations under the terms of the contract. Features of work typically requiring state and/or local permits are handling and storing of explosives, operating cranes near power lines and railroad tracks, and operating steam boilers, mines, quarries, and labor camps. In addition, permits are frequently required for overweight loading of trucks and temporary access to state and local roads. Emphasize cooperation with state and local authorities. The contractor is responsible for securing the permit and for protecting all roadways, structures, utilities, and vegetation. Government or other property damaged by the contractor will be repaired by, or at the expense of, the contractor. The Resident Engineer keeps an accurate record of all damages.