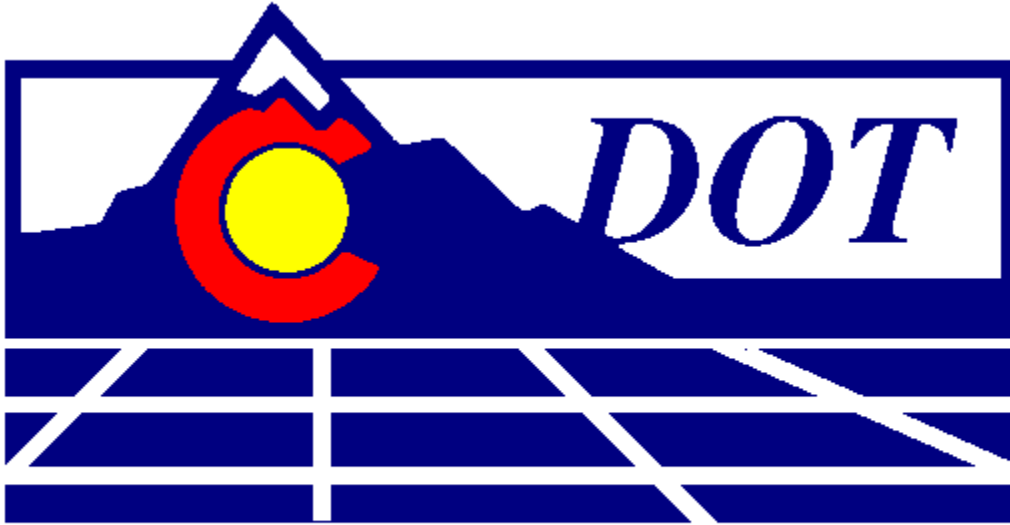


State of Colorado



Colorado Department of Transportation

Design

Build

Manual

April 15, 2006 (Revised on April 24, 2014)

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1.0 Acknowledgements

The Colorado Department of Transportation's Design-Build Manual was developed with the cooperation of the T-REX staff, COSMIX staff, Colorado Department of Transportation subject matter experts, the American Council of Engineering Companies of Colorado (ACEC), the Colorado Contractors Association (CCA), and the Federal Highway Administration (FHWA). The authors of the manual expressly thank all of you for your assistance and sharing of "lessons learned."

The Innovative Contracting Branch of the Colorado Department of Transportation also thanks the Professional Engineering Services firm Carter and Burgess, and Icenogle, Norton, Smith and Blieszner, P.C. for their cooperation, guidance and assistance in developing this manual. The Design-Build Manual was prepared under the direction and oversight of the Staff Services Branch Manager for Innovative Contracting.

The Contents of this Manual reflect the lessons learned from design-build projects at the Colorado Department of Transportation and within the State of Colorado. Regulations, Laws, Statutes, Rules and Policies incorporated into this Manual are current at the time of release of this document. Guidelines reflect the views of the author and are based on working experience and lessons learned.

The Design-Build Manual, as accepted and published, represents the Colorado Department of Transportation's Procedure for Design-Build Contracting as identified in Policy Directive 504.0.

2.0 Preface

Transportation facilities are directly related to our economic health, and quality of life. The demands on transportation facilities in the State of Colorado continue to grow, along with the competition for available funding and expectations of increased quality and higher levels of service. To ensure timely, efficient and effective responses to these demands approved projects may be delivered using the Design-Build Contracting process.

The design-build selection and procurement process has many potential benefits not achievable with the traditional design-bid-build delivery method. A comparison of process sequencing shows how the phases of design, advertisement, award, construction and completion of the design-build method offer significant savings in time over the design-bid-build method. The potential benefits of Design-Build include; a savings of time, cost, and administrative burden; improved quality without sacrificing schedule and budget; a reduction in the risks; and improved coordination of efforts.

Design-Build is an alternative delivery strategy where Design and Construction services are included in a single Contract. Using the design-build approach the Department provides conceptual designs and required performance results. The design-build delivery method requires construction firms to team with consultant design firms to work together to design and construct the improvements. The design-build team is given the responsibility for Quality Control and Quality Assurance for the Work, including, Design, Construction and Materials. This QC/QA approach places the design-build team in full responsibility, and thereby eliminates the conflict over errors and omissions.

The shift to Design-Build from Design-Bid-Build allocates responsibility and risk to the parties who can best manage the processes and outcomes. It allows for innovation in design, construction techniques, construction phasing, sequencing, risk management, traffic management, public information and cooperative communication.

Design-Build procedures continue to advance and evolve with each use. This Manual encompasses the “lessons learned” from design-build projects in Colorado and the United States, and is focused on the two-phase selection process. This Manual provides procedures, guidelines, information, resources and insight for the user to successfully develop and implement a design-build contracting strategy that is unique, yet in compliance with Federal regulations, State Legislation and Department Policy.

For further assistance in the use of Design-Build Contracting contact the Innovative Contracting Branch Manager at 303-757-9855.

3.0 Federal Law, Regulation, Guidelines and Policy

Section 1307 of the Transportation Equity Act for the 21st Century required the FHWA to develop regulations to allow the design-build project delivery system in the Federal-aid highway program. FHWA published the final rule in the Federal Register on December 10, 2002. Federal-aid recipients may now use the design-build project delivery system just as they would the traditional design-bid-build project delivery system.

SAFETEA-LU, or the Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users was passed in 2005. This legislation lowered the monetary threshold for classification as a Major Project. Major Projects are now classified as having an estimated total cost of \$500M or more. Major projects are required to develop a Project Management Plan. In addition, Federally Funded projects having an estimated cost from \$100M to \$500M are required to prepare an Annual Financial Plan. The initial plan must be completed prior to issuance of the RFP.

Federal Legislation requires financial plans for Major Projects and project funded with TIFIA funds. The FHWA Financial Plan Guidance was established in May 2000 and may be found at: <http://www.fhwa.dot.gov/programadmin/mega/fplans.htm>.

[Title 23 U.S.C. 112\(b\)\(3\)](#) provides the FHWA statutory requirements (the “*Law*”) for the design-build project delivery method. In brief the *Law* states:

A State transportation department or local transportation agency may award a design-build contract for qualified projects using any procurement process permitted by applicable State and local law.

Final design under a design-build contract shall not commence before compliance with section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

Design-build contract means an agreement that provides for design and construction of a project by a contractor, regardless of whether the agreement is in the form of a design-build contract, a franchise agreement, or any other form of contract approved by the Secretary.

Qualified projects are defined as projects meeting all requirements of Title 23 C.F.R. Part 636.

[Title 23 C.F.R. Part 636](#) provides the FHWA's regulatory policy for the design-build project delivery method, and is broken into five subparts. Subpart A - General. Subpart B - Selection Procedures and Award Criteria. Subpart C - Proposal Evaluation Factors. Subpart D - Exchanges. Subpart E - Discussions, Proposal Revisions and Source Selections.

Design-Build Projects not meeting the requirements of Title 23 C.F.R. Part 636 may be considered for evaluation, approval and use under FHWA's Special Experimental Project

No. 14 (SEP-14) - "Innovative Contracting" or FHWA's Special Experimental Project
No. 15 (SEP-15) – Public-Private Partnership.

FHWA SEP-14

The SEP-14 program began in 1988 as a Transportation Research Board (TRB) task force effort to evaluate innovative contracting practices having the potential to reduce the life cycle cost of projects, while at the same time maintaining product quality. These non-traditional contracting techniques may include best value, life cycle cost bidding, qualifications based bidding and other methods where cost and other factors are considered in the award process.

FHWA's SEP-14 approval is necessary for any non-traditional construction contracting technique which deviates from the competitive bidding provisions in 23 USC 112, and any contract which uses a method of award other than the lowest responsive bid (or force account as defined in 23 CFR 635B). Additional information on the FHWA SEP-14 process may be found at <http://www.fhwa.dot.gov/construction/cqit/sep14.htm>

FHWA SEP-15

The FHWA SEP-15 process was approved for use in October of 2004. The process was developed to identify for trial evaluation new Public-Private Partnership approaches in project delivery. The four main components identified were, Contracting, Compliance with Environmental requirements, Right-of-way Acquisition, and Project Finance. The Contracting portion of SEP-15 is focused on alternate contracting practices.

The Compliance with Environmental requirements portion of SEP-15 is focused on processes for "streamlining." This may include the option of including the NEPA study as part of the Design-Build Contract. SEP-15 projects cannot be used to modify environmental and other requirements external to title 23 of the United States Code.

The Right-of-way Acquisition portion of SEP-15 is also focused on processes for streamlining. An example may be transferring more activities for acquisition to the Design-Build Contractor, yet retaining oversight and approval. SEP-15 cannot be used to circumvent the Uniform Relocation and Real Property Acquisition Act of 1970, as amended (URA) 49CFR Part 24.

The Project Finance portion of SEP-15 is intended to promote greater and more effective private sector involvement in the delivery of Federal-aid construction projects. Examples may be Tolling or Concession Contracts. The partnership of private investors and public transportation agencies can result in greater project funding and innovation. Specific information on the FHWA SEP-15 process may be found at <http://www.fhwa.dot.gov/ppp/sep15.htm>.

4.0 State Legislation and Regulations

The use of Design-Build Contracting in Colorado is provided for in Revised Statute, Part 14, Article 1 of Title 43.

The Legislation authorized the Department of Transportation to enter into design-build contracts and to use an adjusted score design-build selection and procurement process. The legislation allows design-build contracting to be used regardless of the minimum or maximum cost. Use of design-build contracting must be based on the individual needs and merits of the project, and is subject to approval by the Transportation Commission.

Specific Information on Revised Statute, Part 14, Article 1 of Title 43 may be found at: <http://198.187.128.12/colorado/lpext.dll?f=templates&fn=fs-main.htm&2.0>

The Legislation also required the creation of the Colorado Code of Regulations (CCR) for the implementation and use of Design-Build Contracting.

Colorado Code of Regulations 2 CCR 601-15 was created to comply with Legislation, and established Policy and Procedure requirements for CDOT to procure Design-Build Contracts for Transportation Projects. 2 CCR 601-15 consist of 22 Sections. Understanding, awareness, and most importantly compliance with each Section is required.

Section 3 - Policy 2 of CCR 601-15 states:

- ✓ CDOT may use a Design-Build Contract process.... where the Chief Engineer determines such use is appropriate and in the best interest of the public
- ✓ Based on individual need and merit of the project CDOT may use:
 - Adjusted Score Design-Build (i.e. two-phase Design-Build) Contract process
 - Low Bid Design-Build Contract process
 - Any other process the Chief Engineer determines appropriate

Also included Policy 2 of CCR 601-15 are the Design-Build Contract rules for:

- ✓ Design-Build Definitions which should not be altered or redefined
- ✓ Subcontracting (DBE, ESB,...) which identifies the need to identify goals and participation
- ✓ General Requirements for Design-Build Firms, which identify the Firm's responsibility or liability to legal status and compliance with all applicable requirements.
- ✓ Conflict of Interest, which identifies not only Firm objectivity but also Consultant conflict
- ✓ Scope of Work, providing adequate detail and identifying applicable standards and specifications in the IFB or the RFQ
- ✓ Award and Contract, which identifies Best Value, Two Phase, Low Bid and Fixed Price bases for awarding contracts

The Colorado Code of Regulations for Design-Build, 2 CCR 601-15 may be found at the following link: <http://198.187.128.12/colorado/lpext.dll?f=templates&fn=fs-main.htm&2.0>

5.0 Colorado Department of Transportation

All Design-Build Contracting shall follow the processes and methods presented in the Design-Build Manual. Procedures identified in the Design-Build Manual are based on, and comply with, Federal Regulation, State Legislation, Colorado Court Rules and Colorado Department of Transportation Policy Directives.

The use of CDOT Form 463 and Form 1180 is required. Because the work presented is conceptual there is no “final design” and much of the information requested on the forms cannot be provided. The Project Manager should complete the form with all relevant information, including a statement disclosing the use of the design-build delivery method.

To assist the Chief Engineer in Approval of the use of Design-Build Contracting a Position Paper shall be prepared by the Project Manager. This document outlines the project specific information needed to justify use of the Design-Build Contracting method. It must account for costs and resources required to develop, implement, and support the process. Aspects of quality assessment processes, document control, consultant support, co-location and legal support must be fully considered and identified.

An Official Approval Request to the Chief Engineer shall be prepared and submitted by the Regional Transportation Director. The position paper should accompany the Approval Request. A draft template for the Chief Engineer’s Approval to use the Design-Build Contracting method is included in the Resource Section of the Manual.

In accordance with State Legislation the use of design-build contracting must be based on the individual needs and merits of the project, and is subject to approval by the Transportation Commission. The Chief Engineer and Executive Director shall determine the course of action necessary to secure the Transportation Commission’s approval.

Further development of the projects’ design-build process should be minimized until all authorizations and approvals have been secured.

6.0 Design-Build Acronyms and Definitions

The Acronyms and Definitions provided in the Resource Section of this Manual are taken from Federal Regulation, State Legislation, Colorado Court Rules and previous Colorado Department of Transportation Design-Build Contracts.

The Acronyms are part of, and provide for, the legal terminology for Design-Build Contracting and shall not be altered or modified without prior consultation, review and approval by the Chief Engineer.

The Definitions are also part of, and provide for, the legal terminology for Design-Build Contracting. However “Definitions” may be specific to applications and use within each individual project. Thus the provided Definitions must be reviewed and revised for each projects’ use to reflect the circumstances and proper Book reference where applicable.

Definitions developed and used by the Design Build Institute of America (DBIA) are available for review at: www.DBIA.org.

7.0 Design-Build Project Development

Design-Build Delivery Methods

There are three distinct selection procedures of the Design-Build Contracting process guided by Federal Regulations and State Statutes. They are:

The “Two-Phase” selection procedure consists of a Request For Qualifications (RFQ) followed by a Request for Proposal (RFP). The Award criteria options include; Lowest Price, adjusted low-bid (price per quality point), meets criteria and low bid, weighted criteria process, fixed price and best design, and best value.

The “Single-Phase” selection procedure consists of a RFP only, and is issued based on the use of a pre-qualification list. The Award criteria options are the same as those listed for the Two-Phased Selection.

The “Modified Design-Build” selection procedure consists of a “two-phase” or “single-phase” selection process. In either application the Award criteria is based on “lowest price and technically acceptable.”

Which selection process is appropriate? Typically the “two-phase” procedure should be used for all design-build projects. However, a *negative* response to any one of the questions below may indicate the use of a Single-Phase or Modified Design-Build process would be more suitable.

Are three or more offers anticipated?

Will offerors be expected to perform substantial design work before developing price proposals?

Will offerors incur a substantial expense in preparing the proposal?

Have you identified and analyzed other contribution factors? Including:

- 1) The extent to which you have defined the project requirements
- 2) The time constraints for proposal period and delivery of the project
- 3) The capability and experience of the potential contractors
- 4) The Department's capability to manage the selection process
- 5) Other criteria considered appropriate

The Award of all Design-Build projects, regardless of procedure must be based on two elements. They are the “Cost” element, and the “Technical” element. Together these two elements define “Best Value.”

All design-build projects are developed and delivered using the same regulations and guidelines. However the definition of award criteria may result in significantly different approaches and Contracts. An example of this is the T-REX project and the COSMIX project. The different attributes and goals of each project resulted in “best value” being defined differently. The T-REX project used an “upset” pricing structure with an optional Best and Final Offer (B.A.F.O.). The COSMIX project used a Fixed or Guaranteed Maximum Price with Additional Requested Elements (A.R.E.). These two distinctly different, yet acceptable Contract approaches were developed based on the unique goals of each project.

The Department has not advanced development or implementation of a Single Phase selection procedure. The Single-Phase selection begins with the Request for Proposals, as the short-listing process, or Request for Qualifications, is replaced by an existing pre-qualification list.

A “Work Plan” for the Modified Design-Build selection process has been developed and is being used as a “Pilot” on selected and approved projects. Pending review and refinement the process maybe fully accepted and authorized for project use with approval from the Chief Engineer. The Modified Design-Build work plan and guidelines are included in the Resource Section of this Manual.

The Design-Build Contracting process can be summarized by the following activities:

- ✓ Identification as potential design-build project
- ✓ Identification of project attributes (goals and risks)
- ✓ Approval authorization request
- ✓ Team formulation
- ✓ Scope definition
- ✓ Base data gathering
- ✓ Request for Proposal preparation
- ✓ Selection of Design-Build Team
- ✓ Administration of Contract

Selecting Design-Build Projects

The Design-Build Contracting delivery method is generally suited for projects with high potential for innovation associated with complexity and schedule. Types of work on projects that may be given initial consideration are:

- ✓ Bridge replacement on major transportation facilities
- ✓ Construction or re-construction of major transportation facilities
- ✓ Interchange construction or re-construction on major transportation facilities
- ✓ Widening of major transportation facilities
- ✓ I.T.S. development, or integration, on transportation facility networks
- ✓ Projects where construction phasing is a major issue

In addition the selection and use of the Design-Build Contracting delivery method may be based on project finance options, including:

- ✓ Revenue generating projects (Tolling)
- ✓ Bonded projects
- ✓ Public-Private-Partnership projects with funding agreements
- ✓ Innovative Financed projects (TIFIA or Concessions)

Other considerations used in selecting Design-Build Contracting include:

- ✓ Status of right-of-way acquisition or potential for delays in securing parcels
- ✓ Status of securing Inter-Governmental or Cooperating Agency Agreements
- ✓ Status of securing Permits
- ✓ Public and Private Utility relocation and or adjustment Agreements
- ✓ Unforeseen conditions such as hazardous materials
- ✓ Unforeseen sub-surface or geological features
- ✓ Constrained schedule for design, construction and completion
- ✓ Ability to transfer, share, and manage risks
- ✓ Ability to define the scope for both design and construction
- ✓ Department's ability to develop, implement and support the Design-Build process

Defining Project Scope

The scope should describe the existing conditions and the expected outcomes, along with the project's NEPA Decision Document, and commitments of the document. The scope should describe the project goals, and the Department's ability to transfer, share, and manage risks. The Department must define what development activities it will complete; what degree of definition needs to be provided to describe these activities; and how to transfer, share, or manage the risks inherent in the scope and activities. Dependent on the type of work, and the degree of risk, the design may not need to be advanced significantly beyond the information developed for the NEPA Decision Document.

The major work effort in the development of a Design-Build project is identifying, documenting, and defining the scope of work, as opposed to design-bid-build, where the major work effort is preparing a complete set of plans and specifications. Both processes entail transportation planning, budgeting, NEPA documentation and preliminary engineering activities.

The identification, documentation and definition of scope can be accomplished by identifying and evaluating unique project attributes, including:

- ✓ Project goals
- ✓ Risks
- ✓ Cost & Budget
- ✓ Schedule

- ✓ Quality
- ✓ Impacts resulting from an accelerated non-sequential processes
- ✓ Department resources and capability
- ✓ Industry capability and support

Development activities needed to accurately define existing conditions and the scope include:

- ✓ Environmental surveys
- ✓ Control surveys
- ✓ Right-of-way Plans
- ✓ Existing Geotechnical data,
- ✓ Existing Hydraulic data
- ✓ Existing Structure Inventory
- ✓ Conceptual Roadway plans
- ✓ Utility Ownership Maps
- ✓ Existing Traffic data
- ✓ Required Agreements
- ✓ Required Permits

The level or amount of detail provided by these activities, and the risk associated with the level of information provided, must be assessed by the project team. The results of these actions represent the Scope of Work.

With the Scope of Work identified and activities roughly defined a Project Schedule must be developed.

At a minimum the Project Schedule should identify:

1. Time estimated to:
 - Complete the Development Activities
 - Develop Conceptual Designs
 - Develop the Design-Build Procurement Process
 - Implement the Design-Build Procurement Process
 - Support the Design-Build Procurement Process
2. Staffing and assignments needed to support all “Time” elements
3. Costs associated with all “Time” and “Staffing” elements

Staffing for a Design-Build Project

All staff working on the project must actively participate and support design-build contracting practices and methods. They must be familiar with the fundamentals and principles of design-build contracting. They must also have experience in and a thorough understanding of the design-bid-build delivery process. The development of the Contract encompasses a significant effort and assistance of technical experts who must be versed

in the preparation of prescriptive and performance provisions. Generally these technical experts comprise the Organizational Staffing or “team” for a Design-Build project.

Creating a project team can be equated to obtaining the resources needed, or staff available, to undertake the activities required to define the scope. Some activities are defined and completed during the Contract development stages and support from the staff used to provide the service can be minimized or reduced. Other activities cannot be defined or completed until the Contract is awarded thus requiring extended use of the supporting staff. And there are a few activities that cannot be defined or completed until the Project is accepted, thus requiring full and uninterrupted use of the supporting staff.

The composition of the assigned project team may vary widely from project to project and Region to Region. The Project Manager must focus their team’s efforts and attention on administration of the “Contract.” Supporting team members will focus on ensuring technical and process details of the Contract are complied with. Team members may be assigned specific sections of the Contract for oversight, such as: Roadway, Structures, Hydraulics, Pavement Design, Right-of-Way, Environmental Compliance, Public Relations, Management of Traffic, or Quality. The need for project Administrative staffing should not be overlooked. The day-to-day development, management and security of project documents are vital.

Other key staffing is necessary to ensure oversight, development, support and management of the design-build project and process. This staffing includes an Executive Oversight team, a Chairperson and Assistants, Evaluation Committees, Technical Advisors, Subject Matter Experts and Observers.

The Executive Oversight Committee oversees the project’s design-build process development. They authorize and approve for release prepared documents such as the Letter of Interest, Request for Qualifications and Request for Proposals. They also authorize and approve criteria and processes used to evaluate proposals.

The Technical Advisors and subject matter experts may have expertise in one or more technical element areas of the project. These may include; public information, quality management, traffic management, roadway design, construction methods and techniques, and safety. The subject matter experts will participate in the Evaluation of Qualifications, the Evaluation of Proposals, or both. Typical organizational structures for managing the evaluation processes are included in the qualification evaluation and proposal evaluation resource documents of this Manual.

Administration of the Design-Build Contract

Efforts to administer a design-build contract are focused on assessing compliance with processes and end-results. The design-build concept places risks of ownership and accountability on the selected design-build contracting team. These risks are further identified and defined in the submitted response to the Final Request for Proposals, which after selection and award become a portion of the “Contract.” The design-build

contracting team must develop, implement, support and maintain Quality Control / Quality Assurance initiatives.

They must prepare a program and process that will:

- ✓ Identify documents and reports non-compliance
- ✓ Develop and document solutions to non-compliance
- ✓ Ensure and restore compliance

Until compliance is reached the Work cannot be accepted and payment may be withheld. The Department's efforts of assessment are statistically based and developed to support a pre-established level of confidence. Higher levels of compliance result in fewer Department assessments. Increased or high levels of non-compliance result in increased Department assessments. Ultimately the ownership and accountability for contract compliance falls with the selected design-build contracting team.

Developing Project Goals

Project Goals are typically developed in multiple steps, and in consideration of multiple influences. Goal identification may be accomplished by completing a series of refinements. Initially the Stakeholders who are expected to identify the goals and participate in the goal setting process must be identified. A typical panel is comprised of:

- ✓ Executive Management (Executive Director, Deputy Director, Chief Engineer)
- ✓ Regional Transportation Director
- ✓ Regional Program Engineer
- ✓ Regional Resident Engineer or Project Manager
- ✓ Consultant Project Manager and Key Staff
- ✓ Department Specialty Area Project Staff
- ✓ Lead Agency Representation (FHWA, FTA, FRA, RTD)
- ✓ Entity Funding Partners (Local Government)
- ✓ Facilitator

Prior to having a formal goal setting meeting all identified goal setting stakeholders should be provided preparation materials for consideration and focus. The materials that may be useful include:

- ✓ Project overview
- ✓ Project proposed improvements
- ✓ Project feedback from Public Surveys
- ✓ Project financial scope (budget, cost and finance strategy)
- ✓ Project Political or Community commitments
- ✓ Project Environmental mitigation requirements
- ✓ Project constraints on full or partial closures
- ✓ Project Traffic Management requirements
- ✓ Other project specific information or detail as identified

The Goals will influence development, negotiation, implementation and administration of the Contract. Goals are frequently end-result or outcome focused. They place the risks and responsibility for success on the Design-Build Contracting Team.

Examples of considerations or influences that drive goals are:

- ✓ Constrained Budgets
- ✓ Finance Strategies or funding sources
- ✓ Restricted Design and Construction time frames
- ✓ Congestion and Management of Traffic
- ✓ Minimizing Impacts to the Public
- ✓ Highly Technical or Extremely Complex Solutions
- ✓ Political and or Community commitments
- ✓ Environmental mitigation or enhancement commitments
- ✓ Quality
- ✓ Developing and Maintaining Support

The Goal Setting meeting can be completed in one session with adequate and proper planning. The process or structure of the meeting is:

- ✓ List all Initial goals
- ✓ List all potential outcomes of the goal
- ✓ List all benefits (pro's and con's) of the goal
- ✓ List all risks of the goal
- ✓ List all impacts created as a result of the goal
- ✓ Agree to "Final" goals (yes or no)

Once the Final Goals have been identified they must be prioritized or ranked. This may be done by:

- ✓ Establish initial priority list of final goals
- ✓ Establish weighting of final goals
- ✓ Evaluate success potential of the project if the goal is removed
- ✓ Agree to Final priority or rank of final goals

The Final Goals and priority will be reflected in the Contract, the Technical Requirements and in the determination and evaluation of "Best Value" as disclosed in the RFP.

Identifying and Allocating Risk

The design-build process is based on risk assessment, assignment, and allocation. Understanding and allocating risk is necessary to determine ownership and responsibility for individual tasks. Design-Bid-Build primarily uses prescriptive provisions which place a high level of, if not total, risk on the Department. Design-Build uses performance

provisions which allow the Department to assign and allocate risk to the party most capable to manage the risk. There are two categories of risk in Design-Build. The Contract Risk as related to Book One, and Technical Risks as related to Books Two through Five. The risk decisions made in Book 1 of the Contract directly affect the risk decisions described and depicted in Book 2, the Technical Requirements. Risks must be continually reviewed and evaluated throughout the entire development, implementation, and support process.

There is a cost to risk regardless of which party it is assigned and allocated to. When assigning and allocating risk consideration must be given to:

- ✓ Which party, the Department or Design-Build Contractor, can best manage the risk?
- ✓ How much is the Department willing to pay the Design-Build Contractor to take the risk?

The process of risk assessment, assignment and allocation can be initiated by review of:

- ✓ The project goals, and
- ✓ The tasks required to define the project scope

Each goal and each task has associated risks. The assignment and allocation of these risks will affect project development and the Contract.

The assignment and allocation can be further refined by considering these two questions:

- ✓ What is the likelihood (high or low) of the risk occurring?
- ✓ What are the consequences (catastrophic, manageable, or negligible) of the risk?

The Department typically includes definition, assignment and allocation of risk in the Contract for items such as: Acceptance of work; Errors and Omissions; Sub-contracting; Labor disputes; Force Majeure; Professional Engineering Services and Liability for design; Contract changes; Performance; Claims; Ownership of ideas; Differing or changed site conditions; Hazardous materials; Cultural resources; Endangered species; Permit requirements; Utility relocations; QC/QA responsibilities. Incentives/disincentives; Liquidated damages; Payment methodology.

Task Activities

Preliminary investigations needed to scope and develop the design-build project are similar to those undertaken for a design-bid-build project. Control surveys, preliminary surveys, right-of-way plans, environmental studies and permits, hydraulic analysis, geotechnical investigations, utility investigations and required agreements must be completed. The information provided as a result of these activities provides the base data required to develop the Conceptual Design, identify, assign and allocate risk, and provide other information necessary to develop and prepare the RFP. The Department's

Conceptual Design must display that the improvements can be reasonably constructed within the constraints and restrictions identified in the RFP.

This base data, and the conceptual design, may or may not be used by potential design-build contracting teams. However it will be the basis for decisions they make in developing their response to the RFP. It is common that the design-builder will re-do or verify much of the base data to validate their solutions and designs. The design-builder undertakes these efforts because they are accountable and liable for completion of the design, including solutions developed by their Professional Engineering services team partner.

The detail and amount of data gathered will vary project-by-project. Depending on the type of project, the data collection may occur in stages, each with more detail. The amount of development, detail, or definition needed can be estimated by answering the following questions:

- ✓ Is there a need for a concise definition of the project?
- ✓ Does the amount of detail support the Department's risk assessment, assignment, and allocation?
- ✓ Is the detail or definition needed to develop the conceptual design?
- ✓ Will the detail or information be re-done or verified by the design-build team?
- ✓ Does the detail or information create an equal playing field for all teams?

For reasons of risk management the Department has a preferred position requiring complete definition of the following task activities:

- ✓ Complete Survey Control
- ✓ Right-of-Way Ownership Plans
- ✓ Right-of-Way Acquisition Schedule
- ✓ Right-of-Way Access Plans
- ✓ Conceptual Roadway Plans (Horizontal and Vertical Alignments)
- ✓ Pavement Designs
- ✓ Existing Geotechnical conditions
- ✓ Existing Hydraulic conditions
- ✓ Existing Traffic Configurations
- ✓ Environmental mitigation and NEPA commitments
- ✓ Identification of pre-existing hazardous materials
- ✓ Existing Utility Locations
- ✓ Securing all Agreements and Permits
- ✓ Securing all Intergovernmental Agreements
- ✓ Securing all Cooperating Agency Agreements
- ✓ Securing Department required Permits and or Applications

These activity areas are described in more detail below. The descriptions and detail are intended to provide assistance in developing project scope, definition, risk management and development of the Contract. Design-Build Contracting Teams should use and

evaluate the provided information in the development of their solutions and concepts. Inadequate, insufficient, or overly defined information may limit innovation, increase risk, reduce competition, or increase overall project costs.

Control Survey and Preliminary Survey Mapping

The Control Survey establishes horizontal and vertical control, and is required to identify right-of-way parameters and the amount and type of impact resultant of the conceptual design. The Control Survey establishes an equal understanding for all parties, and is the basis for all survey data developed by the Department or design-build contracting team. The amount of preliminary survey mapping completed should define the project and the conceptual design, assist in estimating the project cost, and provide a basis for all design-build contracting teams to develop alternate solutions. The recommended survey and mapping tasks should:

- ✓ Establish control throughout the project
- ✓ Provide stationing and control lines
- ✓ Identify existing roadway inventory items by type and location
- ✓ Display existing right-of-way lines
- ✓ Display proposed right-of-way lines based on the conceptual design

Supplemental data identified during development of the conceptual design should also be provided. This may include:

- ✓ Topographic information needed to support other task activities
- ✓ Existing alignments
- ✓ As-built data
- ✓ Wetland delineation
- ✓ Hazardous Material or Landfill locations

Right-of-way and Access

The Department shall remain in full ownership and control of all actions requiring Acquisition of Right-of-Way under the Uniform Relocation and Real Property Acquisition Act of 1970, as amended (URA) 49CFR Part 24.

Because the Department provides Conceptual Designs rather than Final Designs the right-of-way process follows a specialized approach. Right-of-Way Plans consist of Preliminary Parcel Impact Maps which are developed from County Assessor Maps and the Conceptual Design Roadway Plan Sheets. These maps identify the parcel owner and the type of impact (total take, partial take, or permanent easement). They are also used to:

- ✓ Develop right-of-way cost estimates
- ✓ Determine staffing needs
- ✓ Determine clearance priorities

- ✓ Identify and define construction scheduling and sequencing requirements

The preliminary parcel impact maps are supplemented with an informational matrix that identifies, as a minimum:

- ✓ The parcel by number
- ✓ The parcel impact size and legal description
- ✓ The use for the impact
- ✓ The date of Possession, Entry and Use

The Preliminary Impact Maps and supplemental informational matrix are continually updated to reflect progress, additions or deletions. Possession, entry and use of a parcel must be managed with extreme care to prevent significant negative impacts to the project and Department. For these reasons Immediate Possession or Condemnation actions should be initiated in accordance with the Regulations and Guidelines, with the offer of continued on-going negotiations. Care must also be taken to ensure all Access Permits are secured prior to need. The Contract should restrict the duration and use of Local streets and Right-of-Way to prevent prolonged or undesirable use during construction of the improvements.

The Risks of Temporary Easements, which are identified and defined as a result of the design-builder's solutions, are fully assigned, including costs and expense, to the design-builder. Temporary Easements must be acquired in full compliance with the Uniform Relocation and Real Property Acquisition Act of 1970, as amended (URA) 49CFR Part 24. The design-builder must hire, retain and use "Key Personnel" experienced and familiar with CDOT Policies, Processes, Manuals and the U.R.A.

To ensure compliance and intent the Design-Builder shall also:

- ✓ Request authorization for all Temporary Easements
- ✓ Prepare and Document Appraisals, or
- ✓ Prepare and Document Value Findings
- ✓ Submit Appraisals and Value Findings for review and approval
- ✓ Complete a Phase 1 Environmental Assessment for easements not identified in the NEPA Clearance Document
- ✓ Document all actions, meetings and negotiations undertaken for temporary easements
- ✓ Ensure "Key Personnel" communicate with design and construction forces to maintain compliance with Temporary Easement processes and restrictions.

The Department's Conceptual Design must completely fall within the right-of-way identified on the plans and preliminary parcel impact maps. To allow innovation and flexibility, horizontal and vertical tolerances are specified in the Contract. These tolerances must also be accounted for in the Department's preliminary parcel impact maps.

Consideration must be given to the final condition of right-of-way with regard to historic drainage, maintainability, accessibility and “finish” (the area between the improvement and ROW line). A process or agreement should be developed and in place to coordinate or resolve these issues before construction begins.

Often solutions proposed by design-builders require additional acquisitions. In these situations the risk of the acquisition falls completely with the design-builder. However, the acquisition remains under the control and direction of the Department. These risks include meetings, investigations, clearances, permits, delays, damages and all other associated actions, costs and expenses necessary to acquire the impacted parcel in accordance with the URA.

Conceptual Roadway Plans

Basic roadway concepts must be provided which display the reasonable ability of constructing all improvements within the right-of-way identified and provided. To limit impacts and risks, and to allow for innovation, an envelope of flexibility is provided. This envelope identifies the amount of vertical and lateral deviation the Design-Build Contractor may use in determining their final design. The Conceptual Design should identify the width and number of travel lanes and shoulders. Design criteria or Department requirements must be specified.

Pavement Design

Pavement design data should consist of condition reports, existing sub-grade information, or supplemental as-built plans. End result designs, or performance provisions, should be developed based on “life-cycle-cost” and future traffic forecasts. Temporary or detour pavements should be based on existing traffic data and existing or proposed sub-grade conditions. The risks of maintenance of temporary and detour pavements should be placed completely on the Design-Build Contractor. All shoulders for final configuration alignments should be designed with the same criteria as the final end-result condition to provide safety and maximum potential for future use.

To select a preferred pavement alternative, a Life Cycle Cost Analysis (LCCA) will be performed pursuant to the requirements of the CDOT Pavement Design Manual. When the LCCA(s) for the alternate sections are greater than %, the Region will specify the most cost-effective alternative as the required pavement section. The alternative pavement sections will be applied for projects with greater than \$60 million in pavement materials and the typical sections for both alternatives will be shown in the RFP.

When the LCCA(s) for the alternate sections is within %, for all types of D-B project delivery methods, the Region may elect to allow alternate pavement sections on the project, or the Region will select the pavement type pursuant to the Pavement Type Selection Committee procedures in the CDOT Pavement Design Manual. The alternative

pavement sections will be applied for projects with greater than \$60 million in pavement materials and the typical sections for both alternatives will be shown in the RFP.

When the Region allows alternative pavement type bidding:

- For low-bid Modified Design Build Project, the bids will be adjusted by the factor specified in the Contract. The adjustment factor will be calculated pursuant to the most recent version of the Alternative Pavement Type Bidding Specification currently used for Design-Bid-Build projects. Selection of the lowest bidder will be based on the lowest adjusted bid.

For Design-Build (D-B) and Streamlined Design-Build (SDB) projects, a cost adjustment factor may be applied to the proposals when the total cost of pavement materials is less than \$60 million. A cost adjustment factor shall be set by CDOT for projects with pavement material costs greater than \$60 million. The cost adjustment shall be determined by CDOT through a life cycle cost analysis. The Design-Build Team will be required to construct the section(s) specified by the Region and described in the RFP, unless an ATC is accepted which modifies the approved section. Criteria for best value assessment will be determined by CDOT.

*= 10% for projects with less than \$30 million in pavement materials; 15% for projects with greater than \$30 million and less than \$60 million in pavement materials.

The CDOT LCCA should be included in the RFP package for information only.

Geotechnical Data

The Department's Conceptual Design is representative of the data gathered and presented. Geotechnical data represents a significant risk to both the Department and the design-build contracting team. Borehole data information must be prepared and provided as part of the geotechnical baseline report. The borehole data must include a log of stratigraphy indicating depths and layers of subsurface materials, and groundwater elevations. The borehole data and locations must be accurately surveyed to eliminate contingencies by design-build teams.

Data prepared and gathered by the Department is provided and represented as specific to the exact location where it is taken. All design-build contracting teams have the opportunity and option of developing their own data, and basing their alternate solutions from their data. Through this risk management approach the risk of "changed condition" or "differing site condition" is fully assigned to the design-build contracting team.

The risk management approach for unknown geotechnical conditions is one of shared assignment and shared allocation. Geotechnical information and details are gathered consistent with the current version of the Department's Materials Manual. Supplemental information may be gathered and made available from "as-built" plans. Sufficient time and cooperation (access and permit requirements) from the Department should be given to allow all design-build contracting teams the ability to verify and develop geotechnical data. The information gathered will be useful to:

- ✓ Develop risk management plans
- ✓ Establish design parameters (structure foundations, pavement designs, earthwork)
- ✓ Establish the basis for determination of changed conditions
- ✓ Assist in developing an estimated project cost

Hydraulic Conditions

Because the Department presents only Conceptual Designs complete hydraulic solutions cannot and should not be provided. The Department must establish controlling criteria which require action by the design-build contracting team. The actions are developed, implemented and maintained by the Design-Build Contracting team specific to its designs.

Department controlling criteria may include items such as:

- ✓ Hydrology Based Data (on and off site generated)
- ✓ NEPA Decision Document Data
- ✓ Inventory of existing conditions
- ✓ Scour impact
- ✓ Retention or Detention requirements
- ✓ Over-topping criteria
- ✓ NPDES and MS4 requirements
- ✓ Local Agency or Entity requirements

The Regulatory Requirements and desired end results should be clearly identified and defined. Ambiguous, vague or incomplete information increases the risk to the Department and the possibility of undesirable hydraulic designs and results.

Traffic

Traffic data supports many technical areas of the project scope and definition. Many of the tasks undertaken to define this information are performed during the NEPA Decision Document process.

The data provided is necessary to:

- ✓ Develop future traffic forecasts
- ✓ Develop Noise studies
- ✓ Identify the need for and perform Air quality studies

- ✓ Determine Intersection designs
- ✓ Determine Lane configurations
- ✓ Determine Pavement designs
- ✓ Determine appropriate guidelines to be used in Designs
- ✓ Identify Construction phasing
- ✓ Identify Methods of Managing Traffic

The Department should identify controlling guidelines such as the CDOT Roadway Design Guide, or AASHTO's Roadside Design Guide. Where *acceptable* (minimum) requirements are not the desired end result the Department must identify the controlling criteria, such as acceptable levels of service, minimum lane widths, minimum shoulder widths, minimum temporary alignment designs, safety requirements, or other criteria as necessary.

Consideration must also be given to the interim condition during construction. The development of a stakeholder work group may assist in identifying the need and solutions for Methods of Handling Traffic (MHT). This is especially helpful when an IGA may be necessary to implement the MHT.

Traffic Management Strategies (TMS) must also be defined and reported. The thresholds, conditions, and definitions of the TMS should be under the direction of the Department and stakeholders and must be included in the RFP. Federal Regulations on Traffic Management could be used as a guideline. The design-build contractor must prepare strategies and solutions for all construction activities and impacts. These strategies and solutions must be refined to account for dynamic field conditions and safety aspects specific to location and situation. Strategies or solutions that should be considered for development in the RFP include:

- ✓ Mandatory weekly Traffic Management Meetings
- ✓ Mandatory Courtesy Patrol during "peak hours"
- ✓ Mandatory "pull-outs" where full shoulders are not provided at all times
- ✓ Mandatory installation of milepost markers at all times

The ITS element of the RFP should not be overlooked. Recommendations for ITS elements to be incorporated in the RFP include:

- ✓ Early identification and meeting of the ITS stakeholder group
- ✓ Early planning to identify, develop and execute Agreements
- ✓ Development of 30% system design plans for ITS and Communications
- ✓ Department participation on the design-build contractors' ITS design team
- ✓ Verification of existing infrastructure needed to support ITS elements and communication
- ✓ Development of Department required specifications rather than functional requirements.
- ✓ Department oversight and acceptance of inspection and testing
- ✓ Inclusion of ITS elements and work in the Project Schedule

- ✓ Inclusion of ITS elements in the WBS
- ✓ Determination of potential additional funding sources
- ✓ Identification of standards to be used for bidding and work identification purposes

In addition consideration should be given for ITS elements to include:

- ✓ Software development
- ✓ Incident Information Management Systems
- ✓ Mass Transit signal priority systems
- ✓ Parking management systems
- ✓ LRT public address systems
- ✓ VMS systems

Environmental

Environmental compliance in design-build is a considerable risk to both the Department and design-builder. Because the Conceptual Design and Contract provide for horizontal and vertical variance the Design-Builder has the opportunity to develop an efficient Final Design. The variations in the horizontal and vertical alignments in turn affect environmental mitigation measures. The mitigation measures are the responsibility of the Design-Builder to prepare, document, implement, and maintain until acceptance.

The Department must provide a thorough scope with clear definition and risk assignment for all environmental activities. The NEPA Decision Document must be complied with along with Regulatory and permitting requirements. Clear scope and definition must be provided to identify all required permits, and the party responsible for securing the permits. The risk of implementing, maintaining and documenting permit requirements must be defined.

To ensure environmental compliance the Department's Environmental Manager and Project Manager must work together in the development of the Scope and RFP, and during the administration of the Contract.

The Scope and RFP should:

- ✓ Identify all required permits
- ✓ Require the Design-Builder to prepare the permit application for the Department's review and submittal when the Department is the permit applicant
- ✓ Identify time frames for the expected application process
- ✓ Identify mitigation requirements of the NEPA Decision Document
- ✓ Require the Design-Builder to comply with all mitigation requirements of the NEPA Decision Document
- ✓ Require the Design-Builder to develop, implement, maintain, and document Best Management Practices for the project design and per permit application requirements

- ✓ Require the Design-Builder to comply with the CDOT / FHWA Stewardship Guide
- ✓ Require “Key Project Personnel” on the Design-Builder’s team to include qualified environmental staff
- ✓ Define minimum qualifications for the Design-Builder’s environmental staff
- ✓ Require the Design-Builder to identify, develop, implement and maintain mitigation measures resultant from their Final Design to gain Regulatory approval
- ✓ Require the design-build contractor to have scheduled coordination meetings with Regulatory Agencies
- ✓ Require the Work Breakdown Structure (WBS) to detail Environmental Compliance activities
- ✓ Identify impacted Wetlands by, type, function, value and acreage

The Contract should also include a Force Account (F.A.) item for erosion control measures directed by the Department. These measures, and the use of this item, do not substitute for Contract or Permitting requirements resultant of the Design-Build Contractor’s work.

Pre-existing hazardous materials present a risk to both parties. The Department makes every effort to identify the type, location and quantity of pre-existing hazardous materials that may be encountered. These efforts, along with the unknown, still present significant risks. The Department’s approach to managing these risks is to include in the Contract a Force Account method to compensate all related cost (for identified and unidentified locations) of pre-existing hazardous materials.

Utilities

Utility information is important to define in the project scope. It establishes an equal base for all design-build teams. The Department’s standard utility process should be followed and provided in the scope development. This includes identification of the utility by owner, plan and profile location, requirement for relocation and or adjustment, and all owner stipulated design and construction requirements.

A schedule or matrix for relocations or adjustment should be provided and kept up to date. It should identify the party responsible to perform the work and the schedule by which the work should be completed. The Utility Agreements or their draft, and the matrix should be included in Book 2, Technical Requirements.

Dimensions of utilities are often difficult to verify. When actual dimensions vary from scoped dimensions the amount of work required is affected. The Contract should clearly define thresholds and criteria for adjusting contract payments under these conditions.

The Department should secure all Utility Permits prior to release of the Final RFP. Section 43-1-1411(3)(a) of the CRS was created for the Design-Build process, and allows the Design-Build Contractor to perform utility work when the utility owner is unable or

unwilling. The Design-Build Contractor must use the services of a pre-approved contractor. The Department's Utility Agreement, which is referenced in the Contract, discloses the conditions for allowing this non-owner work, and the list of pre-approved contractors.

Early participation with all Utility Companies will assist in securing buy-in and resolving issues related to budgeting, scheduling, who will perform the work and the PSURA's. The RFP should emphasize that the design-build contractor shall:

- ✓ Show all proposed utility relocation designs on the project plans (utility owner and design-build contractor)
- ✓ Field Survey and locate all utilities
- ✓ Provide location information for all utility relocations
- ✓ Complete "as built" drawings for all utilities
- ✓ Require a Utility Pre-Bid conference
- ✓ Require scheduling, verification and documentation of all utility work completed on the project (owner and design-build contractor)
- ✓ Require coordination meetings between the design-build contractor and utility owner

Agreements and Permits

To limit risks all agreements (inter-governmental and agency) should be executed prior to the issuance of the Final RFP, and included in Book 3, Applicable Standards, Data and Reports. For situations where this is not possible the draft agreement should be included as a minimum. A list of all required permits should be identified in Book 3, Applicable Standards, Data, and Reports. The list should identify the signature party, permitting party, anticipated time frame to secure the permit and all other permitting requirements.

Determining Structure

The project structure consist of two components, they are:

- ✓ The Contract component - Book 1, and
- ✓ The Technical components of:
 - Book 2 - Technical Requirements
 - Book 3 - Applicable Standards, Data and Reports
 - Book 4 - Contract Drawings
 - Book 5 – Reference Documents

The Request for Proposals (RFP) includes the Contract component (Book One) and all Technical components (Book Two through Book Five). The Proposal of the selected Design-Build Contractor also becomes part of the "Contract." The majority of effort in developing the design-build contract is undertaken in Book One, Book Two, and Book Three with lesser efforts required for Book Four and Book Five. For these reasons the guidance provided and the primary focus of this Manual will be Book One, Book Two

and Book Three. Templates for all books will be provided in the Resource Section of the Manual.

Technical elements are identified and defined in the Scope of Work provided in Book 1, and the project specific technical components provided in Book Two through Book Five. Project design elements can be described by multiple approaches, including:

- ✓ Performance requirements described in design criteria and process narrative, or
- ✓ Partially defined elements with the remainder of tasks described, or
- ✓ Completely defined elements with a prescriptive plan and specification provided to Design-Builder
- ✓ Adherence to current Department M&S Standards
- ✓ Allowance for Design Variances
- ✓ Used and dependence on existing project roadway, structure and sub-grade features
- ✓ Adherence to Regulations
- ✓ Assigning and sharing Risk
- ✓ Project Commitments
- ✓ Definition of, and ability to determine Acceptance

Book One

Book One is titled the “Contract” and contains items such as; acronyms, definitions, terms and conditions, processes and procedures, method of measurement and basis of payment, use of provided information, interpretations, milestones, incentives and disincentives and all other contract requirements. This section can be equated to the Department’s “100 Section” of the Standard Road and Bridge Specifications used in typical design-bid-build projects, and the “Contract” signed after Award. A template for Book One is included in the Resource Section of this Manual. It was developed and based on past Department design-build projects, State Law and Federal Regulation. The development and implementation of each design-build project will result in a unique Contract, or Book One, which requires the assistance of Legal expertise and review of the Department’s Attorney General Representative.

Book Two

Book Two of the structure is titled “Technical Requirements.” It is composed of 19 “sections” which present conceptual design information, performance provisions and specified process or procedure requirements. Each of the 19 sections present an independent degree of definition related to the information provided, and the management of risk. Some sections may completely define a procedure and process. Others may define the outcome while only providing a concept or approach. Book two also identifies “third party agreements” such as entity agreements or utility or railway agreements. The templates for Book Two – Technical Requirements can be accessed through the Hyperlinks shown in the Table of Contents. These templates should be

considered for use in all design-build projects. Remember that risk presented in Book Two impacts the Contract as prepared in Book One, and vice versa.

Book Three

Book Three of the structure is titled “Applicable Standards, Data and Reports.” The Book contains or identifies a listing of standards, data or reports referenced in other Books of the Contract, or required and necessary to comply with Contract conditions. Examples may be CDOT M & S Standards, CDOT Design Standards, AASHTO Design Standards, FHWA Reports, Entity or Utility owner Design Standards, the Signed NEPA Decision Document, etc. A template Book Three is provided in the Resource Section of this Manual for consideration and use in all design-build projects.

Book Four

Book Four of the structure is titled “Contract Drawings.” This book is used to present, identify, and reference drawings related to right-of-way and or architectural requirements. A template for Book Four is included in the Resource Section of this Manual for consideration and use in all design-build projects.

Book Five

Book Five of the structure is titled “Reference Documents.” This book contains a list of all documents referred to in Books One through Four. A template for Book Five is included in the Resource Section of this Manual for consideration and use in all design-build projects.

Design-Build, Two-Phase Procurement Process

The Design-Build Two-Phase Procurement Process is composed of two *required* processes. They are the Request for Qualifications (RFQ) and the Request for Proposals (RFP). The processes and details to develop each of the process are described in the following sections.

The Process Schedule was developed based on the Department’s current approach of not releasing the Request for Proposals (RFP) until the NEPA Decision Document has been signed and issued. [Note: FHWA process SEP 15 and proposed rulemaking for SAFTEA:LU allow the RFP to be released before the signed NEPA Decision Document has been issued, however the Department’s current risk position is not to take this accelerating action.]

The Process Schedule may be copied electronically and modified for each project by:

- ✓ Changing the NEPA Decisions Document Date
- ✓ Adding or Deleting Tasks
- ✓ Modifying Task Durations

Confidentiality and Security

The validity of the evaluation and selection process is dependent on complete confidentiality. Each participant in the evaluation process for either the RFQ or RFP shall sign a “Confidentiality and Non-Disclosure Agreement, No Conflict of Interest Statement.”

All proposal documents shall be stored in a secure locked room during non-working hours. Documents should be reviewed in a common, secured area during working hours. All evaluation notes and comments shall be secured and stored in the same manner. Documents will not be accessible to the general public, to proposers, or to Department employees not involved in the selection process. A “log” shall be kept of documents removed from the secure holding area. The log shall document what documents have been removed, by whom, the date, and the times removed and returned. A primary and backup point of contact should be assigned to ensure security and logging of document viewing.

Letters of Interest (LOI)

As is customary with developing, advertising and awarding work the Department seeks industry interest. This communication effort not only informs industry partners of the Department’s intent, it also meets the legal obligation as a formal notification of intent and Advertisement. It establishes a process and opportunity for the Department and industry to begin to exchange information, gain understanding, and measure interest. The Department’s initial release of information is prepared in a formal request to the industry as the “Letter of Interest,” or LOI. For Design-Build projects this letter is “Advertised” or published for a period of not less than 45 days in a news paper of wide circulation, such as the Construction Daily Journal, and on the Department’s web site.

A template Letter of Interest is included in the Resource Section of the Manual. The LOI shall be prepared on official Department Letter Head paper. Authorization of the letter content and approval to release shall be obtained from the Executive Management Oversight team. Interested Firms are required to submit a “Statement of Interest” in response to the LOI by a specified cut-off date.

Firms meeting the LOI requirements may attend an informational meeting disclosed and identified in the LOI. This informal meeting provides an opportunity for Firms to ask questions, and for the Department to clarify project information and the design-build

process. The LOI also discloses the Department's anticipated date to issue the Request for Qualifications (RFQ).

Request for Qualifications (RFQ)

The RFQ process is the first phase of a two-phase procurement process and is used to solicit the Statements of Qualifications (SOQ's) from interested Design-Build Firms. It is a formal and structured process which must comply with Federal Regulations, State Statute, and the Colorado Code of Regulations. The RFQ asks interested Proposers to submit a Statement of Qualifications (SOQ) in response to criteria defined within the RFQ. The RFQ shall be published at least 45 days prior to the anticipated date for award of a contract.

Interested Firms are required to submit a "Statement of Qualifications" in response to the RFQ by a specified cut-off date identified in the RFQ. The RFQ shall include:

- ✓ A scope of work
- ✓ A description of the elements that will be evaluated
- ✓ The basis and factors upon which the most highly qualified Firms will be determined.
- ✓ Other requirements as determined

Typically the RFQ format consists of eight (8) sections. They are:

- ✓ Introduction
- ✓ Background Information and the RFQ Process
- ✓ Required Content of the Statement of Qualifications and Confidentiality
- ✓ Statement of Qualification Submittal Requirements
- ✓ Evaluation Process
- ✓ Phase Two of the Procurement Process – the Request for Proposals
- ✓ Protest Procedures
- ✓ Submittal Forms

The RFQ shall be prepared on official Department Letter Head paper, and authorization of the content and approval to release the document shall be obtained from the Executive Management Oversight team.

Firms that desire to participate shall submit a Statement of Qualifications (SOQ). The SOQ shall identify:

- ✓ The Qualifications of the Firm
- ✓ The Key personnel
- ✓ Information of the Firm's technical approach
- ✓ Other information required by the RFQ

Developing Evaluation Criteria

The specified content of the SOQ must be identified in the RFQ, and should be developed using proven methods that will determine the true qualifications of a Proposer. Criteria may include:

- ✓ Capabilities
- ✓ Experience,
- ✓ Past performances
- ✓ Current work load on specific issues pertinent to the design-build project
- ✓ Project team organization,
- ✓ Key project team members
- ✓ Minimum qualification requirements for key members
- ✓ Key member resume
- ✓ QC/QA approach
- ✓ Construction team member safety records
- ✓ Approach and understanding of the project
- ✓ Legal and Financial disclosure

To develop and maintain a level and uniform playing field the RFQ should rigidly define the SOQ submittal format. It should specify:

- ✓ The maximum number of single-sided pages
- ✓ The font size
- ✓ The font type
- ✓ The allowable paper size
- ✓ Labeling and pagination requirements

The evaluation criteria contained in the RFQ focuses on specialized capabilities required for the project. Individual criteria are weighted according to their relative importance to the successful completion of the project. The actual criteria selected for use should be applicable to the project and the Proposer's ability to perform the work. With this in mind, it is also important to avoid criteria that are so restrictive that few, if any Proposers can meet the minimum requirements. Criteria that may be considered are:

- ✓ Individual experience of team members with Design-Build contracting
- ✓ Corporate experience with Design-Build contracting
- ✓ Experience in the execution of fast-track projects
- ✓ History of the proposed team working together
- ✓ Specialized design capability for the key project elements
- ✓ Specialized construction capability for the key project elements
- ✓ Experience with complex construction staging, traffic control, site conditions
- ✓ Safety record
- ✓ Staff available (Project Manager, Design Manager, Construction Superintendent, Quality Manager, etc.)

- ✓ Quality performance
- ✓ QA/QC organization
- ✓ Bonding record or proof of bonding ability
- ✓ Past performance on awarded contracts (completion, liquidated damages, quality, claims, fines, schedule)
- ✓ Financial capacity
- ✓ Experience with formal partnering activities
- ✓ Experience in similar types of work.
- ✓ History of performance (unsubstantiated claims, fines, suits, quality, accuracy, schedule)
- ✓ Understanding of local environment
- ✓ Resource capacity and availability
- ✓ Scheduling and control systems to track and manage project
- ✓ Specialized expertise that reduces risk and assures quality of work

The SOQ evaluation and scoring methods are disclosed in the RFQ. It is important to structure the RFQ to request information about a Proposer's experience that can be evaluated in an objective manner. The SOQ should allow the Proposers to demonstrate their teams' strengths, and permit CDOT to determine which of the teams are the most highly qualified.

Evaluation of Qualifications

CDOT will establish an RFQ review process to:

- ✓ Evaluate the SOQs submitted
- ✓ Determine and short-list the most highly qualified Firms in accordance with the RFQ
- ✓ Short-list the most highly qualified Firms between 10 days and 60 days after the deadline for submission of the SOQs.

A method and evaluation procedure for Statements of Qualifications shall be developed for each project. The procedure shall be approved by the Executive Oversight team. A defensible SOQ evaluation process requires the method and procedure be developed, documented, and accepted by the Executive Oversight Committee before the release of the RFQ. Example SOQ Evaluation Procedures are included in the Reference Section of this Manual.

The evaluation of Statement of Qualifications begins immediately after the submittal date identified in the RFQ. The evaluation process has two steps. The initial step determines responsiveness according to the requirements of the RFQ. It is a pass or fail evaluation. SOQs receiving a "pass" proceed to the next step. SOQs receiving a "fail" are rejected and returned. The failing Firms' only means to cure is through the protest procedure described in more detail below.

The second step of the SOQ evaluation process is a scoring or ranking step where the information in the SOQs for all responsive (pass) Proposers is measured against the evaluation criteria set forth. The SOQ evaluation process parallels the design-bid-build process. It too requires prequalification of an entity of the Proposer's team such as a "Contractor" for the type of work and size of project.

The evaluations are completed by an Evaluation Board. This Board must contain individuals experienced in a broad array of areas of project delivery. The evaluation process should be completed with the entire Board present. This approach will provide the best opportunity for sharing of expertise and reducing the required time for outside research.

There are two established standard methods for evaluating statements of qualifications. The Numeric SOQ Evaluation process where proposals are given a numeric score used for ranking. And, the Adjectival SOQ Evaluation process where categories of acceptance are described and used for rank. Both of these approaches are presented in the Resource Section of this Manual. Regardless of the approach used the entire Evaluation Board must be brought together for training in the evaluation process.

Short Listing

The Chief Engineer, or designee, will notify all responding Firms of their ranking, and will invite those short-listed to submit a proposal in accordance with the RFP.

The maximum number of Firms to be short-listed and invited to submit a proposal in response to the RFP shall be specified in the RFQ. The minimum number shall be two (2) firms. Federal Guidelines state three to five firms should be short-listed. Only firms that have been short-listed during the RFQ process will be allowed to submit a proposal in response to the RFP. Cost or Price related factors are prohibited from use in the RFQ and SOQ.

A formal ranking document must be developed and provided to the Chief for review and approval. Authorization to post or release ranking results, or to issue any ranking notification documents requires prior approval from the Chief Engineer. CDOT will send the record of short listed Proposers (if any) to all Proposers. The Department will also publish the list on its design-build website. After CDOT announces the short list, the Proposers may request a meeting with CDOT. These debriefing meetings should give the Proposers and CDOT an informal setting in which to discuss the RFQ and the short listing process.

CDOT reserves the right, in its sole discretion, to cancel the RFQ, issue a new RFQ, reject any or all SOQs, seek or obtain data from any source that has the potential to improve the understanding and evaluation of the responses to the RFQ, seek and receive clarifications to an SOQ, and waive any deficiencies, irregularities, or technicalities in considering and evaluating the SOQs. The RFQ does not commit CDOT to enter a contract or proceed with the procurement of the project. CDOT assumes no obligations,

responsibilities and liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred by the parties responding to any RFQ. All such costs shall be borne solely by each Proposer.

Protest Procedures

Any protests regarding the SOQ shall be filed with the Project Manager identified in the RFQ in accordance with the procedures set forth in C.R.S. 24-109-101 through 24-109-404, as amended by the Design-Build Regulations, 2 CCR 601-15 Section 22. If CDOT prevails after completion of the administrative protest procedures and any appellate court proceedings, CDOT shall be entitled to recover all reasonable costs and charges it incurred and that are included in the final order or judgment, excluding attorney fees. If the protesting Proposer prevails after completion of the administrative protest procedures and any appellate court proceedings, the protesting Proposer's sole remedy shall be recovery of all reasonable costs and charges it incurred in connection with preparation of the SOQ (excluding any costs incurred in preliminary preparation of a proposal or design) and the costs and charges that are included in the final order or judgment, excluding attorney fees.

Request for Proposals (RFP)

The Request for Proposals (RFP) is the second phase of a two-phase procurement process and solicits proposals from short-listed firms. This process, like the RFQ process, must follow Federal Regulations, State Statute and the Colorado Code of Regulations. The Department must receive approval from FHWA to release the Final RFP. An example FHWA Approval Request is included in the Resource section of the Manual.

The RFP should be issued as soon as practicable but not more than 90 days after the short-listing process has been completed. To assist development and definition the RFP process may be undertaken in two steps. Where this is desired, a "draft" RFP is issued followed by a "final" RFP. If a "draft" RFP is issued first, the date for issuing the "final" RFP shall be extended the same amount of time as that used for the draft RFP process. The specific timeline for issuance shall be described in the RFQ.

Colorado Code of Regulations stipulate 15 required items for inclusion in all RFP's. They include:

- 1) the scope of work
- 2) instructions
- 3) bid proposal forms
- 4) provisions for contracts
- 5) general and special conditions
- 6) basis for evaluation of proposals
- 7) procedures to be followed for submitting proposals
- 8) criteria for evaluation of proposals and their relative weights, and the procedures for making awards
- 9) proposed terms and conditions for the Design-Build Contract

- 10) description of the drawings, specifications, or other submittals to be submitted with the Proposal, with guidance as to the form and level of completeness of the drawings, specifications, or submittals that will be acceptable
- 11) a schedule for planned commencement and completion of the Design-Build Contract
- 12) budget limits for the Design-Build Contract, if any
- 13) requirements for performance bonds, payment bonds, and insurance
- 14) amount of the Stipulated Fee (Stipend), if any, and
- 15) any other information that CDOT in its discretion chooses to supply, including without limitation, surveys, soils reports, drawings or models of existing structures, environmental studies, photographs, or references to public records.

The RFP shall require submittal of a proposal meeting the requirements specified in the RFP. The proposals must be received by CDOT by the deadline specified in the RFP, which shall not be less than 10 days after issuance of the RFP.

The Proposal shall be in two parts: a Technical Proposal; and a separate Price Proposal. The Technical Proposal shall include all information requested in the RFP. The Price Proposal shall include a price for the completed Project, and a price for each salient feature of the Project if so specified in the RFP.

The Technical Proposal and Price Proposal shall be evaluated separately, in accordance with the evaluation factors and process set forth in the RFP. Only after the Technical Proposals evaluation is final will CDOT open the Price Proposal. CDOT will complete evaluation of the Proposals and select the Firm to be awarded the contract under the RFP as soon as practicable, but not later than 180 days after the date Proposals are required to be submitted. If a Best and Final Offer (BAFO) is requested, the date for selection shall be extended the same amount of time as that used for the BAFO process.

General and Special Conditions

The RFP will require Key Personnel identified by the Firm to be retained throughout the solicitation and Contract period in the capacity presented in the Firm's Statement of Qualifications. No modification to this commitment may be made without prior written approval from the Department.

Stipend

CDOT may pay a stipend to the Firms that submit responsive proposals under the RFP, but that are not awarded the Contract, provided the Project solicitation is not cancelled and the Project is awarded. Whether a stipend will be paid, and the amount, if any, shall be identified in the RFQ and RFP.

The submission of a proposal to an RFP, when a stipend is specified, shall constitute the firm's acceptance of the stipend as full payment for all technical solutions and design concepts contained in the proposal. This is an irrevocable transfer to CDOT. The Firm shall not have the option of refusing the stipend and not transferring ownership of all technical solutions and design concepts contained in the proposal. CDOT shall own and have the unlimited right to use on any Transportation Project all or part of the technical solutions and design concepts contained in the proposal. No Stipend will be paid to the selected Proposer if the Award is not consummated due to failure of the selected Proposer to provide the items specified in the RFP.

Instructions to Proposers or "ITP"

The Instructions to Proposers (ITP) shall be included with the release of the RFP (draft and final). The "ITP" fulfills the "instructions" requirement of the RFP, and details the process by which the Proposers will respond to the RFP. It provides an Introduction, Proposal Process, Proposal Requirements, Evaluation Criteria, Procurement Requirements, Forms, and other pertinent instructions to Firms which were short listed from the RFQ process.

Industry Review

When the RFP or ITP raise questions or concerns, or requires interpretation before proposals are submitted, all Firms known to be participating must be given an opportunity to ask questions and receive answers. This may be accomplished through a formal process for Industry Review. The formal process includes:

- ✓ Pre-proposal Conference
- ✓ Industry Review Meetings
- ✓ Pre-Proposal Submittals
- ✓ One-on-One Meetings
- ✓ Request for Information and Request for Clarification (RFI & RFC)

When any of these processes are used the ITP and RFP shall list appropriate dates, times and locations for each.

Pre-proposal Conference

Pre-proposal conferences may be mandatory or optional as stated in the ITP and RFP. The draft ITP will identify the date, time and location of the meeting, and state whether the meeting is mandatory. The Pre-proposal conference is undertaken after the release of the Draft RFP and Draft ITP. It is an informal conference intended to provide information and clarity where all Proposers are invited in a single setting.

Industry Review Meetings

Industry Review meetings are held after release of the Draft RFP and Draft ITP. These draft documents shall disclose the dates, times and locations of the meetings. The meetings are held with the individual Proposer and not in a group setting. The meetings are intended to allow document feedback, questions and answers, and Proposer initiated ACC and ATC questions. Two to three meetings with each Proposer may be considered necessary to adequately complete the Industry Review process.

Pre-Proposal Submittals

The Pre-proposal submittal is used as a precursor to One-on-One Meetings and takes place before release of the Final RFP. All Proposers are requested to submit their ACCs and ATCs to the Department for review and consideration in preparation of the One-on-One Meetings. The draft ITP will identify an estimated date for the submittal of pre-proposal documents.

One-on-One Meetings

One-on-One Meetings are used to meet one-on-one with Proposers over their submitted ACCs and ATCs. This process begins immediately after release of the Final RFP. The Final RFP and Final ITP will identify an estimated schedule for release of an Addendum to the documents based on outcomes of these meetings. The Final RFP and Final ITP will also identify the estimated schedule for these meetings. If One-on-One meetings are held with one RFP Firm, they must be held with all RFP Firms, and they shall be conducted separately.

If the meetings or responses to inquiries result in material changes to the Scope of Work, or otherwise affect the manner or form of the response, all Firms known to be participating will be notified in writing of any such change. When such written notice is given, Firms will be afforded a reasonable amount of time to review these materials, to contemplate any consequences and to consider the content for inclusion in their proposals.

One-on-One Meetings are undertaken with complete confidentiality. CDOT shall not disclose information or details of competing RFP proposals, or furnish information about a Firm's construction techniques, processes, strategies, or equipment, or engage in auction techniques, during such formal discussions. "Auction techniques" include: (a) indicating to a Firm a cost or price it must meet to obtain further consideration; or (b) advising a Firm of its price standing relative to another Firm; or (c) otherwise furnishing information about other Firm's prices.

Request for Information and Request for Clarification (RFI & RFC)

Requests for Information and Requests for Clarification may be initiated by the Proposers upon release of the Final RFP and Final ITP. To accommodate adequate review and response time by the Department the Final ITP will identify a Final Date for submittal of all RFIs and RFCs.

Alternative Configuration Concepts or ACC's

Proposers are encouraged to recommend alternatives to the Basic Configuration, Temporary Configuration, Additional Requested Elements (AREs), and changes to the Quality Management, Geotechnical and Pavement (excluding pavement types), Earthwork, Drainage, Roadways, Structures, Maintenance of Traffic, Public Information, Modifications to the Standard Specifications Category B requirements, and Architectural Requirements (Book 4) that are equal or better in quality or effect (as determined by CDOT in its sole discretion). These recommendations are categorized as "Alternative Configuration Concepts" or "ACCs." Other RFP sections are not subject to the ACC process.

The Basic Configuration and Temporary Configuration are Contract requirements except to the extent that they are superseded by pre-Approved ACCs. Changes to the Basic Configuration, Temporary Configuration, AREs or portions of AREs or to the Quality Management, Geotechnical and Pavement (excluding pavement type), Earthwork, Drainage, Roadways, Structures, Maintenance of Traffic, Public Information, Modifications to the Standard Specifications Category B Requirements, and Architectural Requirements will not be permitted unless they have been Approved by CDOT under the ACC process. Except for incorporating Approved ACCs, the Proposal may not otherwise contain exceptions to or deviations from the requirements of the RFP.

An ACC submission must include:

1. A narrative description of the ACC.
2. The locations where the ACC will be used on the Project.
3. Conceptual drawings of the ACC, if the ACC affects drawings.
4. An analysis of the cost savings and any other benefits of implementing the ACC.
5. An explanation of why the proposed change is equal or better in quality.

If an ACC requires Governmental Approvals, the Proposer has full responsibility for obtaining all such approvals. If any required approval is not subsequently granted with the result that the Proposer must change its approach to meet the original requirements of the Contract Documents, the Proposer will not be eligible for a Change Order that increases the Contract Price or extends the Completion Deadlines.

Alternative Technical Concepts or ATC's

Proposers shall submit Technical Approaches to any Structures not historically used by CDOT. The Structures section of Book 2 will identify these structures. No Technical Approach to any Structure that varies from what is historically used by CDOT will be permitted unless it has been approved by CDOT. The Proposer may submit any other Technical Approaches.

A Technical Approach submission must include:

1. A narrative description of the Technical Approach.
2. Conceptual drawings of the Technical Approach, if the Technical Approach affects drawings.

CDOT will review all submitted ACCs and ATCs, and return verbal comments, as determined in CDOT's sole discretion, to each Proposer during the one-on one meeting. CDOT will return written comments by a date specified and listed in the RFP. Caution must be exercised in the verbalized and written response to all ACCs and ATCs.

Comments on Alternative Configuration Concepts, ACCs, will be limited to one of the following statements:

- ✓ The ACC is Approved
- ✓ The ACC is not Approved
- ✓ Identification of any conditions, which must be met in order to Approve the ACC

Comments on Alternative Technical Concepts, ATC's, will be limited to one of the following statements:

- ✓ The Technical Approach appears to be generally acceptable and within the Contract Document requirements; or
- ✓ Identification of areas in which the approach appears to be inconsistent with the Contract Document requirements.

The Proposer may incorporate zero, one, or more Approved ACCs as part of its Proposal. If a Proposer incorporates an ACC with conditions into its Proposal, the Proposer shall be responsible to comply with the ACC conditions if awarded the Contract. Copies of CDOT's ACC Approval letters for each incorporated ACC shall be included in the Proposal. Except for incorporating Approved ACCs or ACCs with conditions at Proposer's risk, the Proposal may not otherwise contain exceptions to or deviations from the requirements of the RFP.

With Industry Review complete CDOT is ready to prepare and transmit official responses to ACCs and ATCs, and prepare the release of the Amended Final RFP and ITP.

Final RFP

The release of the Final RFP, for risk purposes, is based on prior receipt of the signed NEPA Decision Document. The Final RFP is created by compiling the information and

input gathered during all previous phases. It will reflect Scope of Work changes and clarification resulting from the Industry Review process of the draft RFP and draft ITP release. Refinements in scope and price of the project do not invalidate the process. (Note: FHWA approval is required prior to release of the Final RFP.)

Final ITP

The Final ITP accompanies the Final RFP, and also reflects Scope of Work changes and clarification resulting from the draft RFP and draft ITP release. The Final ITP will identify the anticipated Notice to Proceed date and a Procurement Schedule by which Proposers shall prepare and submit their Proposal.

Evaluation of Proposals

CDOT will establish an RFP Technical Review Process for each project. A defensible evaluation process requires the method and procedure to be developed, documented, and accepted by the Executive Oversight Committee, before the release of the RFP (draft and final). The nature of the elements being evaluated, and the evaluator's qualifications shall be considered when selecting members of the Proposal evaluation team.

There are two established standard methods for evaluating proposals. The Numeric Proposal Evaluation process where proposals are given a numeric score used for ranking. And, the Adjectival Proposal Evaluation process where categorizes of acceptance are described and used for rank. Both of these approaches are presented in the Resource Section of this Manual. Regardless of the approach used the entire Evaluation Board must be brought together for training in the evaluation process.

Formal Discussions

The Department intends to evaluate proposals and to award design-build contracts without the use of Formal Discussions, unless the Department determines, in its discretion, that Formal Discussions are needed. When used, Formal Discussions will be held after all Proposals have been received, and the "evaluation" process is being undertaken.

Formal Meetings are undertaken with complete confidentiality. CDOT shall not disclose information or details of competing RFP proposals, or furnish information about a Firm's construction techniques, processes, strategies, or equipment, or engage in auction techniques, during such formal discussions. "Auction techniques" include: (a) indicating to a Firm a cost or price it must meet to obtain further consideration; or (b) advising a Firm of its price standing relative to another Firm; or (c) otherwise furnishing information about another Firm's prices.

Formal Discussions should be considered for any of the following reasons:

- ✓ To promote understanding of CDOT's requirements and of the proposal.

- ✓ To clarify initial proposals, identify deficiencies in initial proposals, or resolve ambiguities or mistakes in initial proposals.
- ✓ To insure conformance of proposals with the Project work requirements.
- ✓ To facilitate the development of a Design-Build Contract that will be most advantageous to CDOT taking into consideration price and the other evaluation factors set forth in the RFP.

If the meetings or responses to inquiries result in material changes to the Scope of Work or otherwise affect the manner or form of the response, all Firms known to be participating will be notified in writing of any such change. When such written notice is given, Firms will be afforded a reasonable amount of time to review these materials, to contemplate any consequences and to consider the content for inclusion in their proposals.

Best and Final Offer (BAFO)

If Formal Discussions are held a Best and Final Offer (BAFO) will be requested by the Department. All RFP Firms will be given a reasonable opportunity to submit, in writing, revised technical or price proposals that may result from the Formal Discussions.

The BAFO shall include:

- ✓ Notice that Formal Discussions are concluded
- ✓ Notice that the BAFO is the opportunity to submit a Best and Final Offer
- ✓ Notice of a common cut-off date and time that allows a reasonable opportunity for submission of written best and final offers
- ✓ Notice that if any modification is submitted, it shall be received by the date and time specified and is subject to the Late Submissions, Modifications, and Withdrawals of Proposals provision of the solicitation

After receipt of the BAFOs the Department will not reopen formal discussions and the BAFO will be the basis for any award. BAFOs will be evaluated as stated in the RFP, based on the consideration of the revised technical and price proposals.

Selection and Award

The Selection of a proposal shall be announced by written notice to the selected Firm. CDOT shall also, at the same time, send the other Firms a written notice that their proposals were not selected. At the time of award, CDOT may also negotiate minor changes with the selected Firm for the purpose of clarifying the design criteria and work to be done. The negotiated changes must not affect the ranking of the proposals based on their adjusted scores.

Protest Procedures

Protests may be made regarding CDOT's approval of changes in a Proposer's organization or decisions regarding responsiveness, best value evaluation rankings, or Award of the Contract. Protests must be filed by hand delivery to the Colorado Department of Transportation Project Manager within seven Working Days after CDOT releases notice of its Approval of such change. The protester shall concurrently file a Notice of Protest with the other Proposers whose addresses may be obtained from the Project Manager. The Notice of Protest shall state the grounds of the protest.

The procedures applicable to such protests are set forth in the Design/Build regulations, 2 CCR 601-15, § 22, and in C.R.S. §§ 24-109-101 through 24-109-404. The procedures provide, among other things, that the CDOT Chief Engineer or his designee is authorized to settle and resolve any protest within seven working days after the protest is filed. The decision shall inform the protesters of their right to appeal administratively or judicially in accordance with C.R.S. §§ 24-109-201-206. The decision is subject to appeal de novo to the Executive Director of CDOT, his designee, or to the District Court for the City and County of Denver.

Other Proposers may file a statement in support of, or in opposition to, the protest within seven Working Days of the filing of the detailed statement of protest. Evidentiary statements, if any, shall be submitted under penalty of perjury. The protesting Firm shall have the burden of proving its protest.

If the CDOT Chief Engineer or his designee concludes that the entity filing the protest has established a basis for protest, CDOT may withdraw or revise its decisions, rankings, or Award, or take any other appropriate actions, including issuing a new RFP.

If a Notice of Protest is filed, CDOT may proceed with BAFOs or negotiations. However, CDOT shall not Award the Contract until the protest is withdrawn or decided, except in one of the following case:

1. CDOT determines that the public interest requires CDOT to proceed with the Award prior to a decision on the protest, or
2. The protest is so wholly lacking in merit that the protesting Firm is unlikely to succeed in the protest.

Such a determination shall be in writing and shall state the facts upon which it is based.

If the protest is denied, the Firm filing the protest shall be liable for CDOT's costs reasonably incurred in defending against the protest, including consultant fees and all unavoidable damages sustained by CDOT as a consequence of the protest. If the protest is granted, CDOT shall be liable for payment of the protesting Firm's reasonable costs, as defined in 2 CCR 601-15, § 22, No. 3. Except as provided in the previous sentence, CDOT shall not be liable for damages to the entity filing the protest or to any participant in the protest, on any basis, express or implied.