



## Work Plan (SEP-14) Alternative Contracting

Work Plan Special Experimental Project No. 14 (SEP-14)

Alternative Contracting

Projects: Key No. 11489: I-84, Garrity IC to Ten Mile IC

### 1. Introduction

The Idaho Transportation Department (ITD) submits this work plan for review and approval as Alternate Pavement Type Bidding (APTB) projects under the provisions of Special Experimental Project-14 (SEP -14) for the use of innovative contracting practices. ITD initially proposes to utilize this procedure on the I-84, Garrity IC to Ten Mile IC project. Additional projects may be added with submittal of additional information and approval by the Federal Highway Administration (FHWA). Projects in this work plan will consist of total highway reconstruction projects within the State of Idaho. ITD uses its own approved life cycle cost analysis (LCCA) procedure to select pavement type. In this plan it is proposed to advertise projects with an alternate pavement type having an equal design life.

### 2. Purpose

The proposed alternate pavement type bidding is being considered by ITD to take advantage of the cost competitive market between flexible and rigid pavements.

Other states that have used APTB have generally experienced increased competition and a reduction in bid prices on projects where APTB has been utilized. With rising costs associated with paving materials there is a challenge to reduce costs. Increasing demands on available highway funds is pressuring ITD to actively pursue methods that have the potential to enhance the use of tax dollars.

### 3. Scope

The scope of projects using this process will include the design and either construction or reconstruction of pavement. The design work includes the required surveys, geotechnical investigations, pavement design, bridge design as applicable, drainage design, and roadway design. The designs meet the current requirements of ITD's Design Manuals and AASHTO Standard Specifications for the Design of Highways and Bridges. For the I-84, Garrity IC to Ten Mile IC project several standard designs were considered that meet current ITD requirements. The Department has chosen to alternatively bid a Standard Plain Jointed Doweled Portland Cement Concrete Pavement as the rigid option, with an Asphalt Perpetual Pavement as the flexible option. The rigid option was designed using Darwin AASHTO 93 and adjusted with MEPDG. The flexible option is designed using the Per Road Flexible Perpetual Pavement Design & Analysis Software. Traffic information is obtained and resulted in the use of Truck Traffic Classification (TTC) default group 3 for this project.

The intent on each of these projects is to improve the geometric features, increase the capacity, and improve the traffic flow. Construction will comply with ITD's Standard Specifications for Highway Construction, edition 2004 and current Supplemental Specifications and any special provisions. The pavement will be constructed using Idaho's Quality Control and Quality Acceptance (QC/QA) specifications.

Typical sections will be provided in the Plans for rigid and flexible pavements. The contractor will be obligated to construct either the rigid pavement section or the flexible pavement section shown on the plans according to the Standard Specifications.

#### **4. Measurements**

ITD will advertise and solicit bids for this project utilizing its normal bidding process. A pre-bid conference will be held. Prior to the bidding, ITD will provide the Life Cycle Cost (LCC) adjustment factor value that will be added to the Contractors initial bid price.

The LCC adjustment factor will be the difference in future major maintenance and rehabilitation actions between rigid and flexible pavements based on a standard equal life of 40 years unless otherwise directed by ITD. The Design Life for the Garrity to Ten Mile project will be 56 years and the LCC adjustment factor for this project will be directed to be based upon the design life of 56 years. The LCC will be estimated using current costs for the future actions. Future action costs specific to the pavement type will be calculated using ITD's standard process. The LCC adjustment factor will include a discount rate and will be presented as a present worth value.

The successful bidder will be the contractor with the least cost sum of the initial bid cost plus the LCC adjustment factor provided by ITD.

#### **5. Schedule**

1. ITD will advertise the project at least 21 days prior to the bid opening date.
2. ITD will hold a pre-bid conference.
3. Bids will be received and read.
4. ITD will determine the least cost sum of the initial bid plus the LCC adjustment factor.
5. ITD will award the contract to the least cost sum bidder.
6. A notice to proceed with the contract will be issued by ITD after the award.

#### **6. Reporting**

ITD will prepare and submit an initial and final report on the project. The initial report will include the paving industries' reaction to the alternate bid type selection process. It will contain the individual bid items, quantity, and cost for the work as well as the life cycle actions and estimated costs. ITD will prepare and submit a final report at the completion of the project. The evaluation will be prepared cooperatively by Connecting Idaho Partners and ITD Headquarters Materials, with input from the ITD Headquarters Construction Engineer, the Design Consultant, and the Contractor as applicable. The final report will contain an overall evaluation of the process along with any suggestions and recommendations for improving the process.