

Work Plan

Special Experimental Project No. 14 (SEP-14)

Idaho Transportation Department

Fixed Budget/Variable Quantity Contracting

Statewide Programmatic

April 1, 2022

INTRODUCTION

The Idaho Transportation Department (ITD) submits this work plan for review and programmatic approval under the provisions of Special Experimental Project No. 14 (SEP-14) for the use of innovative contracting practices.

PURPOSE

Fixed Budget/Variable Quantity bidding is an innovative bidding technique where a contractor bids a quantity of installed material for a fixed price. The contractor that bids the most quantity wins the bid. In the event of a tie, the contractor that bids the lowest number of working or calendar days will be the winning bidder. Using this Fixed Budget/Variable Quantity contracting technique will help ITD achieve one of its Strategic Goals, to “implement innovative business practices”.

Other expected benefits of this contracting method are to reduce administrative work and speed project delivery, while controlling costs to keep the projects within budget.

SCOPE

This contracting method can be applied to the following project types:

ADA Ramps	Microsurfacing
Automated Traffic Recorder (ATR)	Rumble Strips / Rumble Stripes
Bridge Deck Treatments	SAFLEA (Stress Absorbing Fiberglass Layer of Emulsified Asphalt)
Concrete Panel Replacement	Sand Seal
Crack Sealing	Scrub Coat
Fencing	Seal Coats
Fog Seal	Sign Upgrades
Gravel Road Surfacing	Slurry Seal
Guardrail	Striping / Pavement Markings
Guardrail End Treatments	

These project types lend themselves to this type of innovative contracting because their scope is consistent and repetitive in nature throughout the length of the project.

When considering use of this programmatic for ADA ramps, ensure that the ramp types are similar, within the existing right of way and require no utility relocation. This will increase the chances for contractor

efficiencies while limiting the amount of risk they bid into their quantity. Low variability and repetitive scopes are where this methodology is most appropriate. It is recommended that curb ramps be numbered and prioritized for reconstruction.

SCHEDULE

Projects utilizing this contracting method will be constructed within a single construction season. A minimum and maximum working day range will be based on the engineer's estimate; however, the contractor will bid on the number of days it will take them to complete the project. This will be the contract time. The number of days bid is also used to break a tie, in the event that more than one contractor bids the same quantity.

BID SCHEDULE

To determine the low bid, no other bid items must be listed on the bid schedule other than contingency items. Items should be made incidental to the variable quantity item wherever possible (e.g., Mobilization, Traffic Control, BMPs). Items that might normally be separated into several bid items should be rolled into the variable quantity bid item (e.g., sign posts, sign brackets and brace angles, sign panels).

EVALUATION

In order to evaluate the success of this bidding technique, the ITD will measure three metrics:

1. The overall construction engineering and inspection costs will be analyzed and compared with other similar, conventionally contracted projects. Generally, ITD considers construction engineering and inspection costs to be efficient if less than 10% of the bid amount is spent on these activities.
2. The final construction cost, including change orders, will be compared to the bid amount in terms of a percentage, for the proposed versus the conventional contracting method. Generally, ITD considers a project to be successful if it is constructed within 105% of the bid amount.
3. Industry reaction will also be measured by interviewing the Contractor, the Resident Engineer, and District management to obtain their opinions on how well the bidding technique was received by industry.

REPORTING

ITD will prepare and submit a final report to FHWA after project final acceptance by ITD. The report will contain an overall evaluation of the project, along with any suggestions and recommendations for improving the process. To reduce administrative work, each district can elect to produce a single report covering all SEP-14 programmatic projects for each construction season, provided they report project specific findings under the different project category types.