City of Denton
Materials Management
Solicitation and Contract Incentives for Public Works Projects

The City of Denton may utilize various methods for the procurement of construction services in accordance with the Texas Local Government Code 252 or the Texas Government Code 2269. These may include contracting methodologies such as design-build, construction manager-at-risk, construction manager-agent, and job order contracting, which are solicited through one of the following: Invitation for Bid (IFB), Best Value IFB, or Request for Proposal (RFP). Each method is outlined specifically in the statutes as to the requirements and processes.

The demand to the Dallas-Fort Worth (DFW) market requires the City to consider alternatives to standard procurement methods to ensure timely completion of construction contracts. The City utilizes liquidated damages in contracts to ensure compliance, but alternative pricing methods provide incentives to contractors to complete projects on time or early. These methods may cost the City additional funds, but the inconvenience to the public and motorists are taken into consideration in the evaluation of the award.

I. Cost-Plus-Time or A + B

A. Introduction

A very valuable tool to speeding up project delivery is soliciting based upon cost-plus-time ("A" + "B" proposals). A + B proposals not only focuses on the lowest initial cost, but also factors in the time needed to complete the project. This is especially important in busy congested traffic areas where construction creates delays to motorists or a substantial impact to the economy.

The "A" component is the traditional construction unit-price items base proposal. The "B" component is an evaluated Time Cost Factor. The Time Cost Factor is calculated by multiplying the number of work days proposed to complete the project, and the monetary value, or "Road User Cost" (RUC), set by the City. The RUC is calculated for the specific project and disclosed in the solicitation documents.

The proposer with the lowest overall evaluated cost-plus-time (A + B) to the public is awarded the contract. In the actual contract, the contractor will only be reimbursed for unit items "A". The time allowed to complete the project is set by the proposer's time component "B".

Below is a sample evaluation:

Contractor	Base Proposal (A)	Working Days	Road User Cost/day	Time Cost Factor (B)	Evaluated Cost to the Public
A	$4,250,000	150	$ 11,000	$ 1,650,000	$ 5,900,000
B	$4,500,000	125	$ 11,000	$ 1,375,000	$ 5,875,000
C	$4,650,000	100	$ 11,000	$ 1,100,000	$ 5,750,000

In the above example, Contractor C offered the lowest evaluated cost to the public. A contract of $4,650,000 would be awarded to the contractor with 100 working days. The City is willing to pay a higher base proposal to Contractor C for a lower overall public impact.

The City recognizes that Cost plus Time soliciting is not applicable for all projects and that there is a balance between the benefits of early completion and the increased costs of construction. The following policy should assist in determining if the A + B method of procurement would provide the best value to the City.

B. Road User Cost (RUC)

The RUC is the travel delay costs determined by the City for specific roadways. The value is used to determine the impact to motorists with lane closures or traffic diversions during construction. The monetary value is calculated by determining the delay caused by the project and multiplying by the value of time by vehicle type. The RUC should be approved by the City's Traffic Engineer, or designee, and include the following criteria:

- Time value per vehicle type as determined annually by the Texas Department of Engineers and is located on their website (txdot.gov). The 2017 rate was $22.40 per passenger car and $32.70 per truck hour.
- The number of passenger cars and trucks traveling per hour on the affected roadway as determined by a traffic study.
- The posted speed limit and estimated average speed limit during the construction.

The RUC will be published in the solicitation documents and used to calculate the Time Cost Factor "B" component of the A + B proposal evaluation.

C. Project Selection Criteria

The following is a list of criteria that should be considered prior to choosing an A + B selection mechanism for a street or rehabilitation project:

- Significant impacts to the local community or economy during construction warrant expediting the total length of the project.
- Rehabilitation projects along high traffic corridors.
- Projects that add capacity (may include grade separations).

- City of Denton seeks contractor expertise to facilitate an early completion. In some cases expertise within the contracting community may be able to provide a more efficient solution to a problem.

In addition to meeting at least one of the above criteria, a secondary evaluation should be conducted based upon the following:

- The minimum RUC should be $1,000/day.
- The project is relatively free of utility conflicts, design uncertainties, right-of-way conflicts, or other issues, that may impact the award date or critical project scheduling, but remain outside of the contractor's control.
- Adequate City staff (inspectors, engineers, etc.) is available to limit delays outside the contractor's control.

If any of the secondary criteria are not met, the City should consider alternative methods of procurement. Exceptions may be granted with approval from the Director of Capital Projects or designee.

D. Preparation of a Solicitation

In preparation of a solicitation using the A + B method, the City should provide the following additional information in the specifications:

- The maximum number of working days that will be accepted as a responsive proposal for substantial completion of the project or specific phases.
- The working day and substantial completion definitions need to be clearly defined. Typically, a work day is continuous work for a period of eight (8) hours. Substantial completion is the full use of the project, but may include incidental work to complete the punch list.
- If only a portion of the project is affected by the Time Cost Factor and RUC, each phase should be clearly defined and indicate the phase(s) that will be considered in the evaluation.
- The total number of working days allowed for final acceptance of the project after substantial completion (typically 20 days, but may be longer for larger projects as defined in the specifications).
- The total sum of incentives available to the contractor for substantial completion of the project or specific phase. This may be the road user cost or a greater incentive for high impact projects.
- Incentive amounts for early completion and maximum days allowed for early completion.
- Liquidated Damage value based upon administrative liquidated damages or RUC.

II. Incentive and Disincentive Provisions

A. Introduction

Some public works projects may need to be completed quickly due to numerous factors such as economic impact or third party requirements. If so, the City may opt to incorporate incentives into the contract for early completion. When using an incentive, it's imperative to have a comparable disincentive on the contract to ensure timely completion. In this method, the City may not be paying a higher cost for the total base cost as in an A + B proposal, but may pay additional costs if a project is completed early.

B. Incentives

Incentives are most often extra payments to the contractor for early completion of a project. The engineer should include in the solicitation a maximum days allowed to complete the project. In addition, there must be a maximum number of days allowed as an incentive. The City needs to understand the time limit to ensure that proposers are not increasing the number of days to ensure payment of an incentive or limit their exposure to a disincentive. The amount of the incentive payment should be enough to motivate contractors to complete the project early, but should not exceed the evaluated Road User Cost for the project.

C. Disincentives – Liquidated Damages

There are two standard types of disincentives, Liquidated Damages and Road User Costs (RUC). RUC are travel delays costs as further described in Section I.B. above.

Liquidated damages are pre-agreed charges to the contractor if certain criteria or completion dates are not met. The amount will be determined prior to soliciting each project and may vary depending upon specific phases of the project. The damages should never be punitive and should be based upon actual damages incurred by the City for non-performance by the contractor. The amount should include all expenses including outside consultants that may be involved for oversight of the project.

D. Preparation of a Solicitation

In preparation of a solicitation using incentives/disincentives, the City should provide the following additional information in the specifications:

- The maximum number of working days that will be accepted as a responsive for proposal substantial completion of the project or specific phases.
- The working day and substantial completion definitions need to be clearly defined. Typically, a work day is continuous work for a period of eight (8) hours. Substantial completion is the full use of the project, but may include incidental work to complete the punch list.

- The project may require varying incentives/disincentives depending on the impact to the community. If so, each phase should be clearly defined and indicate the phase(s) to include the incentive/disincentive amounts.
- The total number of working days allowed for final acceptance of the project after substantial completion (typically 20 days, but may be longer for larger projects as defined in the specifications).
- Incentive amount for early completion and maximum days allowed for early completion.
- Liquidated Damage value based upon administrative liquidated damages or RUC.