



WORK PLAN FOR THE 183A NORTH EXTENSION PROJECT

Central Texas Regional Mobility Authority Application for SEP-14 Approval

A. INTRODUCTION

This work plan is submitted by the Central Texas Regional Mobility Authority ("Mobility Authority") for review and approval by the FHWA of the proposed 183A North Extension Project ("Project") as a project under the provisions of Special Experimental Project No. 14 (SEP-14).

The proposed Project includes 5.1 miles of toll facility extending from north of FM 1431 in the City of Cedar Park to north of RM 2243 in the City of Leander in Williamson County. The proposed improvements will consist of 3 tolled lanes in each direction, ingress/egress access ramps for access to/from the facility, electronic toll collection facilities, and a shared-use path. Local traffic will continue to access adjacent properties by use of existing non-tolled frontage roads and signalized intersections. The tolled mainlanes with grade-separated interchanges will service through traffic.

To maximize expediency and flexibility in the implementation of the Project given the pending environmental clearance and potential funding delays, the Mobility Authority is currently designing the project in three segments:

- Segment 1 – 6 tolled mainlanes (from FM 1431 to north of RM 2243)
- Segment 2 – Reveille Boulevard (CR 269) Intersection and Overpass Bridge
- Segment 3 – San Gabriel Parkway (CR 274) (800 linear foot segment)

The successful implementation of the Project will relieve congestion and improve safety on the 183A corridor by segregating through traffic and local traffic, and by providing increased capacity for local traffic. The completion of the Project will result in enhanced mobility and improved safety for the Central Texas region by providing an efficient link between northwest Williamson County and the Austin area. Additionally, the proposed improvements will sustain and stimulate regional growth.

B. SUMMARY OF EXPERIMENTAL PROJECT FEATURES

The Mobility Authority requests FHWA to approve the following experimental aspects of the Project:

Use of lump sum bidding: The bidders will be provided with a set of bid documents including plans, specifications, and quantity estimates. The bidders will be required to develop a unit price schedule for the work that will be converted to a lump sum bid price for the selected contractor.



Use of no-excuse bonus: The Mobility Authority will give the contractor two contract dates for substantial completion of the work. If the work is completed in advance of the earlier date, the contractor will receive a bonus. There are no excuses such as weather delays that may be claimed for not meeting the earlier completion date. On the other hand, there are no disincentives (other than normal liquidated damages) for not meeting the later completion date.

C. PURPOSE

The primary purpose for the use of lump sum bidding is to provide the Mobility Authority greater cost certainty at an early stage. This approach allows a level of risk of quantities to be placed on the contractor. Deferring this risk to the contractor should establish a more accurate estimate of the total construction cost because variances between plan quantities and as-built quantities, except significant changes as defined in the contract, will not result in a contract value change. The Project will utilize a revenue loaded schedule, based upon the lump sum price, for payment applications which will reduce the cost of the construction management consultant in performing field measurements and preparing pay documents. Burden of proving major quantity differentials will be placed upon the contractor.

The primary purpose for the use of a no-excuse bonus is to provide the Mobility Authority greater schedule certainty by increasing the probability of early or on-time completion through contractor incentives.

D. SCOPE

The scope of this SEP-14 request is limited to the Project. The TxDOT Standard Specification Items 1 through 9 will be modified to provide for the lump sum bid and the no-excuse incentive clause.

E. SCHEDULE

The Mobility Authority's goal is to complete the Project by the end of 2011. To achieve this goal, the Mobility Authority has established the following preliminary schedule (all dates in the future are subject to change):

Environmental Clearance for Project:

- May 2009 – Concurrence with finding of Statement of Continuous Activity issued by FHWA for Segment 1
- October 2009 – Finding of No Significant Impact issued by FHWA for Segment 2
- December 2009 - Finding of No Significant Impact issued by FHWA for Segment 3



Segment 1:

- June 2009 – Segment 1 Final PS&E documents complete
- June 2009 – Segment 1 Authorization of Federal Funds
- October 2009 – Segment 1 Start Construction
- October 2011 – Segment 1 Substantial Completion

Segment 2:

- June 2009 – Segment 2 Final PS&E documents complete
- October 2009 – Segment 2 Environmental Clearance
- October 2009 – Segment 2 Authorization of Federal Funds
- November 2009 – Segment 2 Start Construction
- October 2011 – Segment 2 Substantial Completion

Segment 3:

- June 2009 – Segment 3 Final PS&E documents complete
- December 2009 – Segment 3 Environmental Clearance
- January 2010 – Segment 3 Start Construction
- October 2011 – Segment 3 Substantial Completion

SEP-14 Report to FHWA

- January 2012 – Final report to FHWA (addressing all segments)

F. GOALS

The Mobility Authority anticipates that the experimental features described herein will achieve the following goals:

- Improve the Mobility Authority's ability to forecast Project construction cost accurately early on in the Project.
- Increase the probability of early or on-time completion.
- Provide additional support for Project financing through issuance of toll revenue bond at more attractive rates.

G. DESCRIPTION OF BIDDING

The Mobility Authority will require bidders to be pre-qualified by TxDOT prior to submitting their bid. The Mobility Authority will prepare a bid set of documents that will include the plans, specifications, and an estimate of quantities for the Project. Bidders will be required to submit unit prices for all quantities of work. The selection will be based on the lowest responsive bidder. After contractor selection has been made, the contract price will be converted to a lump sum bid price calculated by the unit prices and plan quantities submitted with the bid.



H. SPECIAL PROVISIONS

Special Provisions and General Notes will be issued to implement the lump sum bidding and the no-excuse incentive clause. The following is a summary of the General Notes and Special Provisions to be used:

000-01 Measurement and Payment

The Special Provision defines the Project as a lump sum payment project. It provides three mechanisms whereby the lump sum may be adjusted. They are as follows:

1. Provisions for “Special Measurement Items” – Prior to bid, the Contractor will be provided an opportunity to review the plans and inspect the jobsite to make an independent assessment of the proposed project quantities for the purpose of presenting a lump sum bid. Three “Special Measurement” items are included in the contract, excavation, embankment, and drilled shafts, whose final quantities and associated costs may be adjusted based on the actual quantity of work performed at the end of the project..
2. Provisions for owner or contractor initiated Change Order work.
3. Provisions for bonus or liquated damage payments based on incentive /discentive special provisions for completion of the work.

004-001 Scope of Work

The Special Provision establishes the “contract intent” of the Project as a lump sum payment contract. The responsibility for the work quantities belongs to the contractor, except for “changes in the work.” The Special Provision requires unit bid pricing for Change Order work, unless the character of the work is significantly changed. The Special Provision defines a significant change in the character of the work, thereby, triggering a Change Order, when the character of the work is materially changed, any of the three special measurement items (excavation, embankment and drilled shafts) vary by more than 5% of the bid quantity, or cumulative Change Orders affect the quantity of major item by more than 25%.

008-001 Prosecution and Progress

The Special Provision defines the requirements for the contractor to prepare the “revenue loaded” schedule and the process to submit a monthly pay request. The Special Provision requires the monthly pay request include certification by a principal representative of the contractor affirming the pay request is accurate. The certification requirement should



increase the likelihood the contractor submitting accurate pay requests, therefore, reducing costs to the Mobility Authority.

The Special Provision includes a clause where the schedule float is a mutually shared resource between the contractor and the Mobility Authority. This reduces the risk of delay claims and associated costs.

The Special Provision includes a no-excuse bonus incentive for early completion, a daily incentive (if the no-excuse date is not met), and liquidated damages for late completion.

009-001 Measurement and Payment

The Special Provision removes the requirement of the Engineer to measure work items except for the Special Measurement Items and removes the use of the "Plan Quantity Items." The Special Provision defines the process of the contractor submitting and the Engineer reviewing monthly pay estimates. These are required to be consistent with Special Provision 000-001 Measurement and Payment and the needs for a lump sum payment project.

I. MEASURES; EVALUATION

The Project, with the requested experimental features, will be evaluated on a range of factors, including:

Construction Cost: When construction of the Project is complete, the final cost of construction will be compared to the lump sum bid price for construction. This will indicate how well the lump sum payment approach helped obtain the goal of accurately forecasting the final Project construction cost.

Project Completion: The Mobility Authority will compare the actual Substantial Completion Date to the Substantial Completion Milestone, originally set in the contract for the no-excuse bonus, to determine what effect the clause had on impacting the actual substantial completion date.

J. REPORTING

The Mobility Authority will submit a final report to FHWA upon completion of the Project. The report will include an evaluation of the techniques used, the industry and Agency reactions and issues, and a recommendation as to whether or not to use this construction method on future projects.



K. CONCLUSION

We believe the procedures described herein will result in successful construction of the next phase in the development of the 183A Turnpike Project. We look forward to working with the FHWA as the Project progresses, and to providing you and others with the benefit of our experiences utilizing approved innovative approaches to project implementation.