GENERAL MEETING OF THE BOARD OF DIRECTORS OF THE CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

RESOLUTION NO. 16-024

APPROVE WORK AUTHORIZATION NO. 3 WITH SCHNEIDER ELECTRIC

WHEREAS, in 2007 the Central Texas Regional Mobility Authority (Mobility Authority) entered into a Contract for Maintenance Services for Toll Collection System maintenance (the "Contract") with Schneider Electric Mobility NA, Inc. (formerly Telvent USA Corporation); and

WHEREAS, the Mobility Authority anticipates the commencement of tolling operations on the MoPac Improvement Project in 2016; and

WHEREAS, Work Authorization No. 3 with Schneider Electric Mobility NA, Inc. provides for operation of the MoPac Improvement Project Toll and the Traffic Management Systems for a period of twelve (12) months; and

WHEREAS, the Executive Director recommends approval of Work Authorization No. 3 under the Contract with Schneider Electric Mobility NA, Inc. which is attached and incorporated into this resolution as Exhibit 1.

NOW THEREFORE, BE IT RESOLVED, that the proposed Work Authorization No. 3 is approved; and.

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute on behalf of the Mobility Authority proposed Work Authorization No. 3 to the maintenance services contract with Schneider Electric Mobility NA, Inc. in the form or substantially the same form attached as Exhibit 1.

Submitted and reviewed by:

Geoffrey S. Perrov, General Counsel

Approved:

Ray A. Wilkerson

Chairman, Board of Directors

EXHIBIT 1 WORK AUTHORIZATION NO. 3

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 3

OPERATIONS OF THE MOPAC EXPRESS LANES PROJECT

THIS WORK AUTHORIZATION made pursuant to the terms and conditions of Article 11 of the Contract for Maintenance Services Contract for Toll Collection System, dated March 3, 2007 and as amended (the Contract) entered into by and between the Central Texas Regional Mobility Authority (the "Authority" or "CTRMA"), and Schneider Electric Mobility NA, Inc. (the Contractor).

PART I. The Contractor will perform traffic management center services generally described in the Scope of Work attached hereto as Exhibit A which is incorporated herein and made a part of this Work Authorization.

PART III. The maximum amount payable under this Work Authorization No. 3 is \$\$294,588 in any 12 consecutive month periods. This amount is based upon the pricing obtained, and is documented by the fee schedule set forth in Exhibit B hereto which is incorporated herein and made a part of this Work Authorization. Exhibits A and B are attached hereto and made a part of this Work Authorization.

PART IV. Payment to the Contractor for the services established under this Work Authorization shall be made in accordance with Article 6 of the Contract.

PART V. This Work Authorization shall commence on the Effective Date of Day One of Toll Revenue Collection and shall be for an initial period of 12 months (the "Initial Term"), The Initial Term may be extended for successive periods of one (1) year each unless and until terminated otherwise. This Work Authorization may be terminated by either party upon the expiration of the Initial Term or any subsequent one year extension of this Work Authorization, provided that at least ninety (90) days' written notice of termination is given to the other party.

PART V. This Work Authorization No. 3 does not waive any of the parties' responsibilities and obligations provided under the Contract, and except as specifically modified by this Work Authorization, all such responsibilities and obligations remain in full force and effect.

IN WITNESS WHEREOF, this Work Authorization No. 3 is executed in duplicate counterparts and hereby accepted and acknowledged below.

THE CONTRACTOR:		
Signature	Date	•
Typed/Printed Name and Title		
CENTRAL TEXAS REGION	AL MOBILITY AUTHORITY	
	he Central Texas Regional Mobility Authority for he orders, established policies or work programs ortation Commission.	
Signature	Date	-
		_
Typed/Printed Name and Title		
LIST OF ATTACHMENTS		
Exhibit A	Scope of Work	

Fee Schedule/Budget

Exhibit B

Exhibit A

Statement of Work

Maintenance & Operations of the MoPac Express Lanes Project

April 2016

Submitted by:



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A1.0 Project Overview

The following overview outlines the basic concept of the MoPac Operations, Image Review and Maintenance and Support of the MoPac Express Lanes Project (Express Lanes). Once the project is in revenue collection The Express Lanes are intended to serve as a reliable north-south travel option along MoPac from Parmer Lane to Lady Bird Lake.

This Scope of Work includes the services, provided by Schneider Electric as the Tolls Systems Integrator (TSI), associated with maintenance and operation of the MoPac Managed Lanes project which includes the Express Lanes Command Center (ELCC), Image Review, Trip Building and monitoring and maintenance of the Express Lanes. The TSI is responsible for the operation and maintenance of the variable tolling system (Toll System) and related Intelligent Transportation Systems in support of the Toll Management System (TMS) described in Toll System and Toll-related ITS Design, Installation, and Testing, Work Authorization 10 (WA#10). The TMS components include, but not limited to closed circuit television (CCTV) cameras, traffic detection system (TDS), variable toll message signs (VTMS), VTMS cameras and VTMS Automatic Vehicle Identification (AVI) equipment. The TSI shall meet the Service Level Agreements and Key Performance Indicators provided in Exhibit 5-1: Service level Agreements and Key Performance Indicators within WA#10. For Maintenance, the TSI's duties, Responsibilities and Liabilities in regards to Performance Measurements are contained within the Maintenance Contract, executed March 3, 2007; Sections 7 Contractor Representations and Warranties and 10.0 Performance Measurement.

The Express Lanes will be in operation and collecting tolls 24 hours a day, 7 days a week, 365 days a year based on current approved business rules, with the exception of limited periodic maintenance intervals.

The Mobility Authority will be responsible for operations of the EXPRESS LANES.

A2.0 Scope of Work Summary

This Authorization is effective for a period of twelve (12) months from Day One of Toll Revenue Collection. This Scope of Work covers two tasks outlined below:

Task 1 – Operations: Manage and operate the Express Lanes Command Center (ELCC) located at 104 North Lynnwood Trail, Cedar Park, Texas 78613, for the purposes of monitoring, supporting Austin Public Safety staff in returning the Express Lanes to normal operational flow, image review and trip building. The term of the Operations Contract shall be for an initial period of one (1) year (the "Initial Term"), commencing on the Effective Date of Day One of Toll Revenue Collection. The Initial Term shall be extended automatically for successive periods of one (1) year each unless and until terminated otherwise. The Operations Contract may be terminated by either party upon the expiration of the Initial Term or any subsequent one year extension of this Operations Contract, provided that at least ninety (90) days' written notice is given to the other party prior to the expiration of the Initial Term and any additional subsequent terms.



Task 2 – Maintenance: Provide monitoring, operations and maintenance support for roadside and Intelligent Transportation (ITS) Equipment identified in WA #10, Exhibit A; Section A3.04, to monitor and validate the accurate operations of the Express Lanes, the Project Host and the Toll System MoPac Express lanes and SH 71 Express Lanes Project. The term of the Maintenance Contract shall be for an initial period of one (1) year (the "Initial Term"), commencing on the Effective Date of Day One of Toll Revenue Collection. The Initial Term shall be extended automatically for successive periods of one (1) year each unless and until terminated otherwise. The Maintenance Contract may be terminated by either party upon the expiration of the Initial Term or any subsequent one year extension of this Maintenance Contract, provided that at least ninety (90) days' written notice is given to the other party prior to the expiration of the Initial Term and any additional subsequent terms.

A3.0 Task 1 - Operations

- The TSI shall staff the ELCC during peak hours and in operations from 5:30am 8pm, 5 days a week excluding holidays in accordance with the Work Breakdown Structure and Staffing Plan (Exhibit B). In no event shall the TSI operator leave the ELCC unstaffed during an emergency, active event or incident, even at the end of a shift.
- This task consists of work necessary to provide on-site monitoring of the ELCC and the systems, variable pricing engine, toll rates, performance of manual tasks necessary for the system's effective operation, and the operations of the ELCC.
- TSI shall provide on-site monitoring and traffic control device operation. TSI shall
 provide the required level of personnel necessary to cover shifts. Shifts can be split
 or modified, as long as the appropriate staffing levels are maintained
- TSI shall provide continuous monitoring of the variable pricing engine results, participate and lead toll rate discussions, provide tuning and configuration updates to the parameters required to meet the CTRMA goals.
- TSI shall provide on-site monitoring of closed circuit television, police radio channels, public safety computer-aided dispatch terminals, Internet-based information sources and software programs
- The EXPRESS LANES will be operated with variable pricing. Operators will strive to
 maintain reliable travel conditions through the use of variable tolls, established to
 proactively monitor demand on the facility. Reliable travel conditions are defined as
 Level of Service (LoS) C or better, with average speeds of 53 mph or higher.
- EXPRESS LANES operations will be monitored and pricing may be adjusted
 manually if necessary, to achieve the desired effect on traffic. However, it is the
 intent the system will operate in an automated manner, to the extent possible, under
 normal traffic conditions. Traffic sensors will be used to monitor continuously the
 operating conditions of the EXPRESS LANES and a variable toll rate will be
 calculated to manage demand, in order to maintain an acceptable LoS.

A3.1 Operations Staffing

TSI shall provide the services including, but not limited to, management, administrative and technical aspects of the Operations Contract. All activities are required to be tracked, meeting minutes produced and coordination activities documented.

TSI shall provide CTRMA with Project Manager for the life of the Contract, as well as an Operations Supervisor for the Operations staff. Any changes to the TSI Project Manager



or any of the other indicated personnel in this Contract shall be subject to review and approval by CTRMA in writing. The hiring and training timeline of these personnel is referenced in the Work Breakdown Structure and Staffing Plan (Attachment A)

A3.2 ELCC Supervisor and Operators

TSI shall provide the names and resumes for all management positions. TSI shall provide the names for all non-management positions.

Operations staff classifications will include the following TSI positions, as a minimum:

- 1. ELCC Shift Supervisor
- 2. ELCC Operators (2)

In addition to a ELCC Shift Supervisor, initially it is anticipated that there will be 2 full-time equivalent ELCC Operators covering the following shifts, 13 hours per day and five (5) days per week:

1. Morning shift: 5:30 AM to 1:30 PM

2. Afternoon shift: 12:00 Noon to 8:00 PM

A3.3 Purpose

The primary purpose of the Operations Staffing is to provide a weekday AM and PM peak staff to operate the EXPRESS LANES, which includes:

- 1. Monitor, direct, and administer the personnel designated to operate and support the Tolling, ATMS, and Managed Lanes system.
- 2. Perform traffic incident detection and verification using the ATMS and available tools.
- 3. Provide reporting and announcement of roadwork, incidents and events.
- 4. Support the CTECC by reporting incidents when detected, as well as support First Responders in incident management and recovery.
- 5. Coordinate operations & roadwork information with various partner agencies.
- 6. Provide training of staff and updates of procedures to facilitate the improvement of operations and day-to-day interaction.
- 7. Provide support during emergencies, storms, and other significant events.
- 8. Support the development of continuous improvement processes through performance measures and self-assessments.
- 9. Furnish materials, supplies, tools, equipment, labor, and other incidentals necessary for the work in accordance with project documents.

A3.4 Duties

- The duties for Task 1 consists of all work necessary to manage all of the Personnel included, but not limited to, general oversight of ELCC operators, Quality Assurance and Quality Control, operational assistance during emergencies; weather-related storms, and other significant events as well as general contract administration. It also includes participation in meetings by the TSI.
- TSI personnel shall be scheduled to work Monday through Friday from 5:30am 8pm. In no event shall the TSI operator leave the ELCC unstaffed during an emergency, active event or incident, even at the end of a shift.



A3.5 Sub-Task Descriptions for Task 1 - Operations:

- a. TSI shall employ, train, supervise, and schedule ELCC operators. The hiring and training timeline of these personnel is referenced in Exhibit B, MoPac Staffing Plan. This shall include accommodating vacations, sick leave, and other absences of CTRMA Operations personnel by providing adequate training and supervision of relief operators, and on-call personnel.
- b. TSI Operations personnel shall be responsible for issuing a work order for equipment repair and helping to establish priorities for repair of failed equipment shall also be considered part of this task.
- c. TSI shall attend regular meetings with CTRMA to cooperatively identify and prioritize work to be performed.
- d. TSI shall maintain records and documentation as directed to support the overall operations of the ELCC, and provide data for documenting performance measures and progress.
- TSI shall participate in post-incident debriefings with all appropriate Agencies involved in managing such major traffic incident, to determine whether existing operating procedures should be changed.
- f. TSI personnel assigned to this task shall be available to respond to electronic notifications within one hour during off-duty hours to provide assistance as appropriate. In the event of a significant incident or situation outside of the scope of the Standard Operating Procedures.
- g. TSI shall provide adequate staff and resources for all tasks and activities throughout the duration of the contract, including planned and unplanned staff absences, emergencies, storms, and other significant events.
- h. TSI shall prepare and submit monthly invoices and progress reports in accordance with applicable CTRMA requirements. Clerical/Administrative support staff will prepare consultant invoices, reports, forms, letters, and any other official project related correspondences, as well as hiring of staff and or other personnel related duties. The Clerical/ Administrative support staff are not expected to have ELCC-related activities as a full-time task nor are they to be based at the ELCC.
- i. During peak periods, on holiday weekends, special events, and/or emergency conditions, greater levels of staffing may be required by CTRMA. If CTRMA deems additional TSI personnel are necessary to operate the expanded functions of the MoPac project, the TSI shall provide extra staff (provided a minimum of four-hour notice is provided) for the short-term. In no event shall the TSI operator leave the ELCC unstaffed during an emergency, active event or incident, even at the end of a shift. If CTRMA determines the additional ELCC staff will be a permanent position requirement, the staffing level shall be adjusted via supplemental agreement. Additional pricing estimates shall be provided upon request.
- j. TSI shall participate in the monitoring of traffic incidents by issuing appropriate notifications to the CTECC and activating motorist information resources from the ELCC during the previously given hours of operation. All other times the CTECC will be



- monitoring for incidents. Problems encountered with any of the systems must be reported immediately to the appropriate systems support personnel as described in the Standard Operating Procedures.
- k. TSI shall provide coordinated monitoring of incidents with CTRMA and outside agency personnel. Incident monitoring shall be performed in accordance with the Standard Operating Procedures.
- TSI shall answer phone inquiries and coordinate incident-related activities with operational partners and provide them with the necessary information about traffic conditions. Telephone calls from the media shall be referred to appropriate CTRMA Personnel.
- m. TSI shall perform Trip verification activities, inspection of queued images within 48 hours to verify posting of toll rates and charges for trips.
- TSI shall perform Trip verification activities, including visual inspection and verification of toll charges for Trips within 72 hours as described in the Image Review Operational Procedures.
- TSI will provide Image Reviewed plates for trip building purpose and image based tolling that will be sent directly to Image Billing vendor as described in the Image Review Operational Procedures.

A4.0 Task 2 - Maintenance

- TSI shall provide monitoring, support and maintenance for all items installed and integrated as part of the MIP. These items include, but not limited to items identified in WA #10, Exhibit A, Appendix F and Exhibit H: four (4) gantry locations for toll system installation, Variable toll message signs(VTMS) and VTMS cameras, traffic detection systems, CCTV cameras, Project Host, servers, generators, uninterruptable power supplies, toll collection equipment, cameras, switches, cabling, Violation Enforcement System, software and configuration items for Automatic Vehicle Identification, Automatic Vehicle Detection System, Image Capture and Processing System, Digital Video Audit System.
- TSI shall ensure the MoPac Express Lanes system meets the Service Level Agreements and Key Performance Indicators identified and agreed to in Work Authorization #10, Section 5 Performance Requirements.

A4.1 Sub-Task Descriptions for Task 2 – Maintenance:

- Four toll collection points are defined on the MoPac Expressway. TSI will be responsible for maintaining the entirety of the Express Lanes, including all components provided directly by the system integration contract with Schnieder Flectric.
- On-site monitoring of traffic control device operation, managed lanes, and variable message sign system of the systems includes monitoring of and dialog with, but not limited to:
 - The relevant software program and the associated/related field equipment;
 and



ii. The software computer programs that allow operators to create/activate/deactivate messages on variable message signs. Each of these sets of computer programs provides for operator dialogue using computer terminals.

A5.0 Contract Support

This task covers work by TSI to update Standard Operating Procedure manuals for use in day-to-day operations and to provide necessary training. CTRMA shall review and approve proposed training procedures. TSI shall provide materials to CTRMA documenting the training of personnel. This task also includes proactively assisting CTRMA in minimizing the impact of construction, maintenance, and other activities on the motoring public.

5.1Sub-Task Descriptions for Support Task:

- a. TSI shall work with CTRMA to develop and update the Standard Operating Procedures (SOP) Manuals for use. Due to the nature of operations, this shall be an ongoing task that will take place at any time an SOP needs to be updated. TSI shall, at a minimum, review all SOPs on a semi-annual basis and provide CTRMA with recommendations for changes to address current operational conditions.
- b. TSI shall provide training to new operations personnel and in-service training to existing staff. The training shall be based on the current CTRMA SOP manuals. Training shall be provided on an as-needed basis as TSI staff is transitioned into the project; when new or significant changes are applied to SOPs or software programs; or when individual operator performance indicates the need for remedial training. Training shall include formal classroom style exercises and hands-on training. The training shall provide for knowledge checks to ensure they are competent prior to their being assigned to the operations tasks. Training shall also include side-by-side mentoring in the form of assignment to the operations tasks for at least one week under the supervision of a Supervisor. This applies to both new operators and operators for whom remedial training is required.
- c. In order to keep the staff current with their abilities, TSI shall conduct "in-service" training to all staff. This shall be in the form of written exercises, or other CTRMA approved methods, and shall take place at least once per month.
- d. Maintenance Personnel and other entities with approved, planned lane closures on State Highways will send information to the TMC describing the details of the activities and lane closures in advance of the closure. TSI personnel will enter this information into the EcoTrafix ATMS software, prepare DMS plans for the work, and forward nonmaintenance work and DMS plan information to appropriate CTRMA personnel, in accordance with Standard Operating Procedures.
- e. On a daily basis, TSI personnel shall review systematically the roadwork information received at the ELCC and identify those locations competing needs for lane closures exist. TSI personnel shall notify the appropriate parties when a conflict is identified. It will be the responsibility of the competing parties to resolve the conflict.



f. On a daily basis, and in accordance with Standard Operating Procedures, TSI personnel shall prepare and distribute a summary report of the scheduled roadwork and send roadwork notifications to CTRMA personnel.

A5.3 PERFORMANCE MANAGEMENT

TSI shall carry out all Work in accordance with the Project Schedule and in a prompt, skillful and careful manner, using qualified personnel and in accordance with the "Standard of Care" defined as that level of care and skill ordinarily exercised by other Employees currently practicing in the same locality under similar conditions. Employees shall perform the Work in a manner that is coordinated with contractor activities on the Project, and in accordance with the terms and conditions of this Work Authorization and the Agreement.

TSI will ensure that operators are compliant with established corporate policy regarding performance evaluation, training, and mentoring. Performance reviews and improvement will also be in accordance with established corporate guidelines.

A5.4 Staffing MANAGEMENT

TSI shall ensure employees meet the following minimum requirements:

- 1) Current driver license or Texas Identification (ID) card in accordance with the Texas Statutes.
- 2) Minimum age of eighteen (18) years old.
- 3) Proof of education, certifications, diploma(s), degree(s), professional affiliation(s).
- 4) Document the minimum of the last five (5) employment positions unless having worked less after graduating high school or college.

TSI shall conduct reference checks on all TSI personnel proposed to be used on/during this Contract and will keep all reference records on file and available to CTRMA for the Contract period.

TSI, during the Contract period, shall, prior to hiring, have resumes of all proposed staff and all new hires along with copies of Driver's Licenses or State of Texas issued ID on file for CTRMA review.



ATTACHMENT B FEE SCHEDULE

Operation Cost Elements

Item No.	Description	Unit	Rate / Hr	Unit Price per Month	MoPac Express	
					QTY.	Per Month
110	Base Monthly Fee	1		\$12,500.00	0	0
111	Software Engineer	160	\$143.11		0	0
112	System Engineer	160	\$156.68		0	0
113	Technician	173	\$109.80		0	0
114	Technician ODC's	1		\$2,039.00	0	0
115	Operation Support	173	\$47.30		3	24,548.70
					Total \$ /Mo.	\$24,549