



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #8 SUMMARY

Approve a new work authorization with Telvent USA, L.L.C., to install improvements needed for a Mobility Authority toll and traffic management center at the Field Office Building on 183A

Strategic Plan Relevance:	Regional Mobility
Department:	Operations
Associated Costs:	\$690,012.67
Funding Source:	MoPac Improvement Project and Manor Expressway funds
Board Action Required:	Yes

Description of Matter: This proposed work authorization with Telvent USA LLC provides for the reconstruction of portions of the existing field operations building on 183A and to provide fully integrated systems to accommodate a Central Texas Regional Mobility Authority tolls and traffic management center.

The construction / integration will be in place in time to accommodate the completion of Manor Expressway which includes toll collection systems, traffic monitoring devices, CCTV cameras and Dynamic message boards.

The system will also accommodate the MOPAC Expressway lanes and be used for traffic monitoring; incident notification and response; HERO dispatch and dynamic tolling.

Reference documentation: Draft Resolution
Work Authorization No. 9

Contact for further information: Tim Reilly, Director of Operations

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

RESOLUTION NO. 13-___

**AUTHORIZING A NEW WORK AUTHORIZATION WITH
TELVENT USA L.L.C., TO INSTALL IMPROVEMENTS NEEDED FOR A MOBILITY
AUTHORITY TOLL AND TRAFFIC MANAGEMENT CENTER AT THE FIELD
OFFICE BUILDING ON 183A.**

WHEREAS, Telvent USA, LLC (“Telvent”) provides services to the Mobility Authority under that certain Contract for Toll System Implementation effective April 27, 2005, (the “Telvent Contract”); and

WHEREAS, the Mobility Authority intends to repurpose portions of the existing field operations building on 183A to provide fully integrated systems that will serve as a Central Texas Regional Mobility Authority tolls and traffic management center, to include and accommodate toll collection systems, traffic monitoring devices, CCTV cameras and dynamic message boards for Mobility Authority roadways; and.

WHEREAS, the services needed from Telvent to complete the tolls and traffic management center can be provided by an new work authorization under the Telvent Contract; and

WHEREAS, the Executive Director recommends approval of the proposed new work authorization attached as Exhibit 1 to this resolution.

NOW THEREFORE, BE IT RESOLVED that Board hereby approves the proposed new work authorization with Telvent; and

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute on behalf of the Mobility Authority the proposed new work authorization in the form or substantially the same form attached as Exhibit 1.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 28th day of August, 2013.

Submitted and reviewed by:

Approved:

Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority

Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number: 13-___
Date Passed: 8/28/2013

EXHIBIT 1 TO RESOLUTION 13-
NEW WORK AUTHORIZATION

[on the following 11 pages]

Exhibit 1 includes the proposed work authorization and Exhibits A through C to that work authorization, but excludes “Exhibit D Contract Plans and Specifications” (consisting of 275 pages), a copy of which is on file with records of the Mobility Authority)

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 9

**TRAFFIC MANAGEMENT CENTER IMPLEMENTATION
290 East Toll Project (Manor Expressway)**

THIS WORK AUTHORIZATION is made this ____ day of August, 2013, pursuant to the terms and conditions of Article 1 of the GENERAL PROVISIONS, Attachment A to the original Contract for Toll System Implementation, dated April 27, 2005 (the Contract) entered into by and between the Central Texas Regional Mobility Authority (the "Authority" or "CTRMA"), and TELVENT USA, LLC (the Contractor).

PART I. The Contractor will perform traffic management center services generally described in the Scope of Work attached hereto as Exhibit A. The Contractor's duties are further described in the Project Schedule and Milestones contained in Exhibit B hereto. The Contractor's duties and responsibilities in regards to renovations to the existing field operations building and intelligent transportation systems integration and testing is detailed in the contract plans and specifications attached hereto as Exhibit D. Exhibits A, B, and D are attached hereto and made a part of this Work Authorization.

PART II. The maximum amount payable under this Work Authorization No. 9 is \$690,012.67. This amount is based upon the pricing obtained, and is documented by the fee schedule set forth in Exhibit C hereto which is incorporated herein and made a part of this Work Authorization.

PART III. Payment to the Contractor for the services established under this Work Authorization shall be made in accordance with Article 12 of the Contract, and Attachment A, Article 1 of the GENERAL PROVISIONS.

PART IV. This Work Authorization shall become effective on the date of execution by the parties hereto and shall terminate on December 31, 2015 unless extended by a supplemental Work Authorization as provided in Attachment A, Article 1 of the GENERAL PROVISIONS. The work shall be performed in accordance with the Project Schedule and Milestones as set forth in Exhibit B.

PART V. This Work Authorization No. 9 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. 9 is executed in duplicate counterparts and hereby accepted and acknowledged below.

THE CONTRACTOR:

Signature

Date

Typed/Printed Name and Title

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

Executed for and approved by the Central Texas Regional Mobility Authority for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

Signature

Date

Typed/Printed Name and Title

LIST OF EXHIBITS

Exhibit A	Scope of Work
Exhibit B	Project Schedule Milestones
Exhibit C	Fee Schedule/Budget
Exhibit D	Contract Plans and Specifications

EXHIBIT A

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY **TRAFFIC MANAGEMENT CENTER IMPLEMENTATION** **290 East Toll Project (Manor Expressway)**

SCOPE OF WORK

A1.0 General

A1.01. Background

The Capital Area Metropolitan Planning Organization (CAMPO) approved the implementation of the proposed Toll Implementation Plan to construct additional capacity on various segments of highway network in the CAMPO Long-Range Plan as toll road facilities in conjunction with plans for development of the Central Texas Turnpike Project. Several of the toll road segments are in various stages of project development, design or construction by the Central Texas Regional Mobility Authority (CTRMA). It is intended that these proposed segments will be implemented by the CTRMA as parts of the CTRMA Toll Road System.

The Toll Collection System (TCS) for the 290 East Toll Project (Manor Expressway) will be all Electronic Toll Collection (ETC). Phase 1 of the Project had opened to traffic in 2012. Phase 2 is currently under construction through a Design Build / Comprehensive Development Agreement (CDA), with an anticipated substantial completion scheduled in 2014.

Additionally, Manor Expressway will require the implementation of a Traffic Management System (TMS). The Manor Expressway TMS will include 8 closed circuit television (CCTV) cameras, 2 dynamic message signs (DMS), and 18 radar vehicle sensing detector stations (consisting of 33 detectors). The implementation of a TMS will enable the CTRMA to manage incidents that occur on the Manor Expressway project, as well as provide roadside information to the public.

The CTRMA has also approved implementation of the proposed Traffic Management Center (TMC). Implementation will consist of renovation of the existing space and facilities at the current CTRMA field operations building, located at 104 North Lynnwood Trail in Cedar Park, Texas. The TMC will serve Manor Expressway, with the intent to also serve the MoPac Improvement Project and other future projects on the CTRMA system.

A1.02. Summary Scope of Work

The Scope of Work for Work Authorization No. 9 provides for the procurement, installation, testing, and implementation of a complete and fully operational TMC by the Contractor. The Contractor shall perform all work and furnish all the materials, equipment, teams, and labor necessary to complete the work as detailed in the 100% contract plans and specifications. Contract plans and specifications are included as Attachment D.

The Contractor shall also be responsible for preparation of the design, specification, system documentation, and furnishing of all materials, equipment, and labor of ITS head-end (central) equipment that will be required for a complete and fully operational TMC.

EXHIBIT A

Additionally, the Contractor shall fully integrate all hardware, software, and other equipment for a completed system. This includes conducting and completing all of the necessary testing as described in the contract specifications before acceptance. The Contractor will be required to have on-site representation in order to coordinate with testing personnel to be designated by the CTRMA.

A2.0 Permitting

The Contractor will be responsible for obtaining and maintaining any licenses or permits necessary for the work to be performed. Preliminary coordination with the City of Cedar Park has already taken place. The Contractor will be required to complete the remaining requirements for permitting, including pulling the building permit and completing the paperwork required for utility connection survey.

A3.0 Shop Drawings/Submittals

Shop drawings and submittals shall be submitted to the architect and/or ITS engineer for work as specified in the contract plans and specifications. All color and finish selections are to be provided to the architect with final approval by the CTRMA. Approval of shop drawings shall be required before fabrication and delivery to job site.

A shop drawing/submittal requirements list will be provided to the Contractor at the construction Notice-to-Proceed meeting.

A4.0 Project Schedule

The construction project shall be complete no later than January 10, 2014. Before starting work on the construction contract, the Contractor will be required to prepare and submit a detailed construction schedule that includes all planned work activities and sequences. Each activity should indicate a beginning date, ending date, and duration in number of working days. The schedule should also show interdependence of activities required for complete performance of the work. Each activity should show a predecessor and successor. Critical path should be clearly and accurately identified.

Project schedule updates should be submitted at each progress meeting.

A5.0 Project Management

This task includes any management activities required for the successful completion of the construction and integration support services. Primary work under this task shall include but is not limited to: meetings, stakeholder coordination, schedule updates, and progress reports.

A5.01. Project Meetings

- Notice to Proceed Meeting: The Contractor shall prepare for and attend the construction notice to proceed meeting to be held with the CTRMA, on a date and time specified by the CTRMA.

EXHIBIT A

- **Progress Meetings:** The Contractor shall be required to attend weekly construction progress meetings to discuss the status of construction. The Contractor shall be prepared to discuss the following items at each status meeting:
 - o Current Activities and Look –Ahead
 - o Project Schedule
 - o Request for Information (RFI's)
 - o Submittals/Shop Drawings
 - o Change Orders (if necessary)
 - o Permitting
 - o Status of asbuilt plans

A5.02. Project Status Reporting

The Contractor shall provide regular project status updates to the CTRMA at least once per week and written progress reports once a month.

A5.0 Asbuilt Plans

The Contractor will be required to prepare “As-Built” plans upon completion of the project. The final “As-Built” Plans shall include all changes, both design and construction, with all shop drawings, including adequate sketches, dimensions, and notes. The Contract Plans including all changes are the Final "As-Built" Plans after construction is complete. All revisions including those occurring during construction will be included in the final "As-Built" Plans set.

Final "As-Built" Plans shall be prominently inked or stenciled across the top of the cover/title sheet. Name of contractor, date contractor began work, and date of final acceptance shall also be included on the cover sheet.

A6.0. Warranties

As described in the contract specifications, the Contractor will be required to provide manufacturer’s warranties on Contractor-furnished equipment for material and workmanship that are customarily issued by the equipment manufacturer or that are at least one (1) year in length, whichever is greater, from the date of final acceptance of the project by the CTRMA. Include unconditional coverage for all parts and labor necessary or incidental to repair of defective equipment or workmanship and malfunctions that arise during warranty period.

Upon receipt of the CTRMA’s written final acceptance of project, the Contractor will be required to transfer the manufacturer’s warranties with proper validation by the manufacturer to the CTRMA.

EXHIBIT B
TRAFFIC MANAGEMENT CENTER
PRELIMINARY SCHEDULE MILESTONES
(Dates and Durations Subject to Change)

Task	Duration and/or Milestone Date
Construction Notice to Proceed	September 3, 2013
Construction Duration	90 days (Maximum)
Final Acceptance	January 2014
Testing (Manor Expy)	100 days
Testing (MoPac Improvement Project)	130 days (To occur before open to traffic date, anticipated for late 2015)

EXHIBIT C
PRICE ANALYSIS - CONTINGENCY LINE ITEM
TELVENT USA, LLC. WORK AUTHORIZATION 9
TRAFFIC MANAGEMENT CENTER IMPLEMENTATION

Task No	Description	Telvent's Price	Pricing shown in Backup Documentation	Labor Cost	Source of Backup	Management Reserve Amount	Management Reserve Percentage
1	HW - Materials/Equipment	\$ 71,905.64	\$ 56,699.00	\$ -	Telvent BOM	\$ 15,206.64	21%
2	Program Management	\$ 41,933.35	\$ -	\$ 41,933.35	Telvent - Represents 392 Manhours	\$ -	0%
3	Design & System Documentation	\$ 16,843.80	\$ -	\$ 16,843.80	Telvent - Represents 113 Manhours	\$ -	0%
4	Furniture	\$ 30,246.07	\$ 23,706.00	\$ -	Rockford Business Interiors \$26,706.11 (Orig bid) - \$3000 Monitors (included in Material/Equip BOM)	\$ 6,540.07	22%
5	Integration/Test (FAT, Commissioning, Final Accept, Etc.)	\$ 64,406.08	\$ -	\$ 64,406.08	Telvent - Represents 514 hours	\$ -	0%
6	Construction	\$ 464,677.73	\$ 364,135.99	\$ 1,244.09	Texas Quality Services \$323,335.99 (Orig Bid) + \$40,800 (HVAC); Also, 9 manhours for Telvent	\$ 99,297.65	21%
TOTAL		\$ 690,012.67					

Final PRICE SHEET
TMC Command Center

Task No.	Description	Qty	Unit	Unit Price (US \$'s)	Extended Price (US \$'s)
1	HW - Materials / Equipment	1	Lot	71,905.64	71,905.64
2	Program Management	1	Lot	41,933.35	41,933.35
3	Design & System Documentation	1	Lot	16,843.80	16,843.80
4	Furniture	1	Lot	30,246.07	30,246.07
5	Integration/Test (FAT, Commissioning, Final Accept, etc.)	1	Lot	64,406.08	64,406.08
6	Construction	1	Lot	464,677.73	464,677.73
TOTAL					690,012.66

The Pricing shown above Excludes:

- All Recurring Data Communication Costs
- Recurring 3rd-Party SW/HW Support Agreements & SW Licenses
- Spares Replenishment Costs

FINAL PRICE SHEET
TMC Command Center

Task No.	Description	Telvent Price (US \$'s)	Pricing Shown in Back Up Documentation	Labor Cost	Source of Back Up	Markup Amount	Percentage
1	HW - Materials / Equipment	71,905.64	56,699.00			15,206.64	0.21
2	Program Management	41,933.35		41,933.35			-
3	Design & System Documentation	16,843.80		16,843.80			-
4	Furniture	30,246.07	23,706.00			6,540.07	0.22
5	Integration/Test (FAT, Commissioning, Final Accept, etc.)	64,406.08		64,406.08			-
6	Construction	464,677.73	364,135.99	1,244.09		99,297.65	0.21
	TOTAL	690,012.66					

The Pricing shown above Excludes:

- All Recurring Data Communication Costs
- Recurring 3rd-Party SW/HW Support Agreements & SW Licenses
- Spares Replenishment Costs

CTRMA - TMC
 Estimate
 (290E + MOPAC)

Item # & Description Code	Item Description	UNITS	ESTIMATED QUANTITIES	Total Estimated Cost (\$)	Total Estimated Cost (\$)
	ITS Server	EA	1	7,500.00	7,500.00
	Display Client	EA	1	4,800.00	4,800.00
	DMZ Router	EA	1	2,500.00	2,500.00
	ITS WorkStation Client	EA	4	3,100.00	12,400.00
	ITS Laptop Client	EA	2	1,450.00	2,900.00
	Core Switch	EA	1	3,450.00	3,450.00
	Terminal Server (4 port)	EA	1	540.00	540.00
	DVI Extender	EA	4	222.00	888.00
	HDMI Extender	EA	4	222.00	888.00
	Wall Monitors	EA	4	2,160.00	8,640.00
	KVM	EA	1	1,800.00	1,800.00
	HDTV Tuner	EA	4	200.00	800.00
	Ethernet Cables/HDMI/DVI	LF	1750	4.50	7,875.00
	Freight	EA	1	1,718.00	1,718.00
					56,699.00